

STR-GX215/GX315/GX415

SERVICE MANUAL

AEP Model

STR-GX215/GX315/GX415

East European Model

STR-GX215/GX315

UK Model

STR-GX315



PHOTO: STR-GX415

SPECIFICATIONS

Amplifier section

		STR-GX415	STR-GX315	STR-GX215
AEP1, German, East European, UK model	DIN, 1kHz	90W+90W (4ohms) 80W+80W (8ohms)	80W+80W (4ohms) 70W+70W (8ohms)	70W+70W (4ohms) 50W+50W (8ohms)
AEP2 model	40Hz-20kHz THD 0.3%	80W+80W (8ohms)	70W+70W (8ohms)	50W+50W (8ohms)

Harmonic distortion
Less than 0.8% at rated output

Frequency response
PHONO: RIAA equalization curve ± 0.5 dB
CD
VIDEO
TAPE } 10Hz-50kHz $^{+0}_{-3}$ dB

Input

	Sensitivity	Impedance	S/N (weighting network, input level)
PHONO	2.5mV	50kilohms	75dB(A net) 75dB*(A net, 5.0 mV)
CD, VIDEO, TAPE 1, 2	250mV	50kilohms	82dB (A net) 82dB*(A net 500mV)

*78 IHF

Outputs

REC OUT, VIDEO (AUDIO) OUT	Voltage 250mV Impedance 10kilohms
HEADPHONES	Accepts low and high impedance headphones

Tone controls
BASS: ± 10 dB at 100Hz
TREBLE: ± 10 dB at 10kHz
Loudness
+6dB (100Hz)

Tuner section

	FM tuner section	AM tuner section
Tuning range	87.5-108MHz	531-1602kHz
Antenna	75ohms, unbalanced	External antenna terminal
Sensitivity at 41dB quieting	18.3dBf, 2.2 μ V (mono) 40dBf, 24.5 μ V (stereo)	—
Usable sensitivity	11.2dBf, 1 μ V (IHF)	Loop antenna: 300 μ V (at 999kHz)
Signal-to-noise ratio	70dB (mono)/66dB (stereo)	54dB (at 50mV/m)
Harmonic distortion	0.3% (mono), 0.5% (stereo) at 1kHz	0.5% (at 50mV/m, 400 Hz)
Selectivity	60dB at 400kHz	30dB at 10kHz
Separation	45dB at 1kHz	—
Frequency response	30Hz-15kHz $^{+0.5}_{-2}$ dB	—

General

System
Tuner section: PLL quartz-locked digital synthesizer system
Preamplifier section: low-noise NF type equalizer amp
Power amplifier section: pure complementary SEPP

Power requirements
220-230V AC, 50/60Hz
240V AC, 50/60Hz (U.K. model)

Power consumption

	STR-GX415	STR-GX315	STR-GX215
AEP1, German model	230W	200W	160W
AEP2, East European, UK model	165W	130W	110W

—Continued on next page—

FM Stereo
FM-AM Receiver
SONY®

AC outlet (STR-GX415/STR-GX315)
(except for U.K. model of STR-GX315)
One switched (100W Max.)

Dimensions

Approx. 430 × 135 × 300mm (w/h/d)
(17 × 5 3/8 × 11 7/8 inches)

including projecting parts and controls

Weight

STR-GX415: Approx. 7.2kg (15lb 14oz)

STR-GX315: Approx. 6.2kg (13lb 11oz)

STR-GX215: Approx. 5.9kg (13lb 1oz)

Accessories supplied

FM wire antenna (1)

AM loop antenna (1)

Remote Commander RM-U141

(STR-GX415/STR-GX315 only)(1)

Sony batteries SUM-3(NS)(2)

Design and specifications are subject to change without notice.

Note

This appliance conforms with EEC Directive 87/308/EEC regarding interference suppression.

MODEL IDENTIFICATION

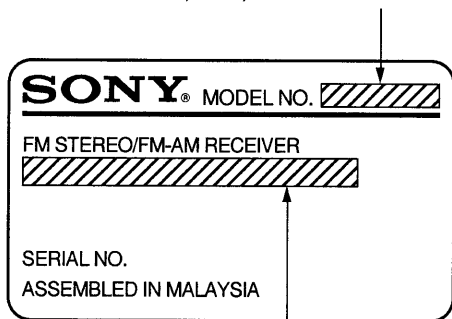
— Model Number Portion —

Carved on back panel

AEP1, AEP2, German, East European model : STR-GX215

AEP1, AEP2, German, UK, East European model : STR-GX315

AEP1, AEP2, German model : STR-GX415



GX215; AEP1, German model : AC : 220—230V~50/60Hz 160W

GX215; AEP2, East European model : AC : 220—230V~50/60Hz 110W

GX315; AEP1, German model : AC : 220—230V~50/60Hz 200W

GX315; AEP2, East European model : AC : 220—230V~50/60Hz 130W

GX315; UK model : AC : 240V~50/60Hz

GX415; AEP1, German model : AC : 220—230V~50/60Hz 230W

GX415; AEP2 model : AC : 220—230V~50/60Hz 165W

Note:

There are two type of AEP models which are depend on countries.

AEP2 : Model for Scandinavian countries, Switzerland, Spain and Portugal.

AEP1 : Model for other European countries.

TABLE OF CONTENTS

<u>Section</u>	<u>Title</u>	<u>Page</u>
1. GENERAL		3
2. ELECTRICAL ADJUSTMENTS		4
3. DIAGRAMS		
3-1.	IC Pin Function	
	• IC300 SYSTEM CONTROL IC(μPD78043GF-SOX4072)	5
3-2.	Block Diagram	7
3-3.	Circuit Boards Location	9
3-4.	Semiconductor Lead Layouts	10
3-5.	Schematic Diagram—Main(GX215) Section—	11
3-6.	Schematic Diagram—Main(GX315,GX415) Section—	15
3-7.	Printed Wiring Boards—Main Section—	19
3-8.	Printed Wiring Boards—Display Section—	25
3-9.	Schematic Diagram—Display Section—	27
4. EXPLODED VIEWS		
4-1.	Cabinet Section	29
4-2.	Chassis Section	30
5. ELECTRICAL PARTS LIST		31

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK OR DOTTED LINE WITH MARK ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

SECTION 1 GENERAL

This section is extracted
from instruction manual.

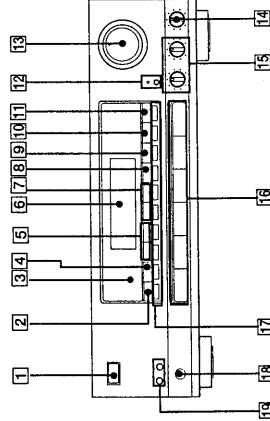
Identifying Parts and Controls

Front Panel

STR-GX215

- 1 POWER switch
- 2 SHIFT button (pages 36 and 38.)
- 3 MONITOR indicator (page 62.)
- 4 MEMORY button (pages 26 and 36.)
- 5 TUNING +/- buttons (page 34.)
- 6 Display window
- 7 PRESET TUNING +/- buttons (page 40.)
- 8 FM button (pages 30 and 34.)
- 9 AM button (pages 30 and 34.)
- 10 TUNING DIRECT button (page 30.)
- 11 FM MODE button (page 32.)
- 12 LOUDNESS button and indicator (page 22.)
- 13 VOLUME control (page 22.)
- 14 BALANCE control (page 22.)
- 15 BASS/TREBLE controls (page 22.)
- 16 Function selectors
When the TAPE 2 MONITOR is pressed, the indicator of the last selected function also remains lit. But the taped program selected with the TAPE 2 MONITOR button can be heard.
- 17 Numeric buttons (pages 30, 36 and 38.)
- 18 HEADPHONES jack (page 24.)
- 19 SPEAKERS A / B buttons (page 24.)

STR-GX215



76

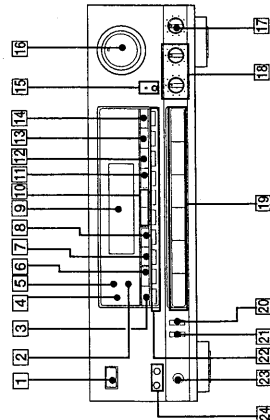
Identifying Parts and Controls

Front Panel

STR-GX415/STR-GX315

- 1 POWER switch
- 2 MONITOR indicator (page 62.)
- 3 SHIFT button (pages 36 and 38.)
- 4 Remote sensor
- 5 STANDBY indicator
The STANDBY indicator lights up when the power cord is connected.
- 6 MEMORY button (pages 26 and 36.)
- 7 BAND button (pages 30 and 34.)
- 8 TUNING/PRESET button (pages 34 and 40.)
- 9 Display window
- 10 +/- buttons (pages 34 and 40.)
- 11 TUNING DIRECT button (page 30.)
- 12 FM MODE button (page 32.)
- 13 CHARACTER button (page 26.)
- 14 DISPLAY button (pages 28 and 48.)
- 15 LOUDNESS button and indicator (page 22.)
- 16 VOLUME control (page 22.)
- 17 BALANCE control (page 22.)
- 18 BASS/TREBLE controls (page 22.)
- 19 Function selectors
When the TAPE 2 MONITOR is pressed, the indicator of the last selected function also remains lit. But the taped program selected with the TAPE 2 MONITOR button can be heard.
- 20 EON (TA-NEWS-INFO) button (page 50.)
- 21 PTY button (page 52.)
- 22 Numeric buttons (pages 30, 36 and 38.)
- 23 HEADPHONES jack (page 24.)
- 24 SPEAKERS A / B buttons (page 24.)

STR-GX415/STR-GX315



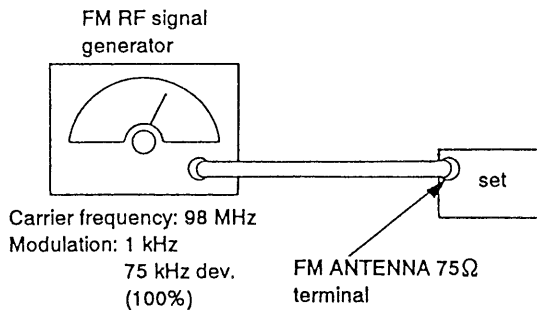
74

SECTION 2 ELECTRICAL ADJUSTMENTS

Note: As a FM/AM tuner (TU1) is difficult to repair if faulty, replace it with new one.

• FM Signal Level Display Adjustment (GX315, GX415)

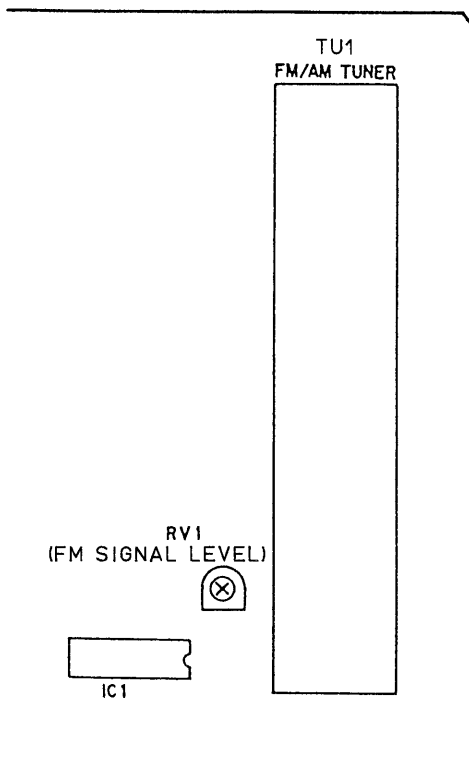
Setting:



Procedure:

1. Tune the set to 98 MHz.
2. Apply 80 dB μ , 98 MHz signal to the FM antenna terminal.
3. Press the DISPLAY button of the unit to indicate the signal level.
4. Adjust RV1 so that signal level indication is changed from SIG 71 dB to SIG 75 dB
5. Apply 81 dB μ , 98 MHz signal to the FM antenna terminal.
6. Make sure that the signal level indication is SIG75dB. If not, repeat step 2 to 6.

[MAIN BOARD] (COMPONENT SIDE)



SECTION 3 DIAGRAMS

3-1. IC PIN FUNCTION

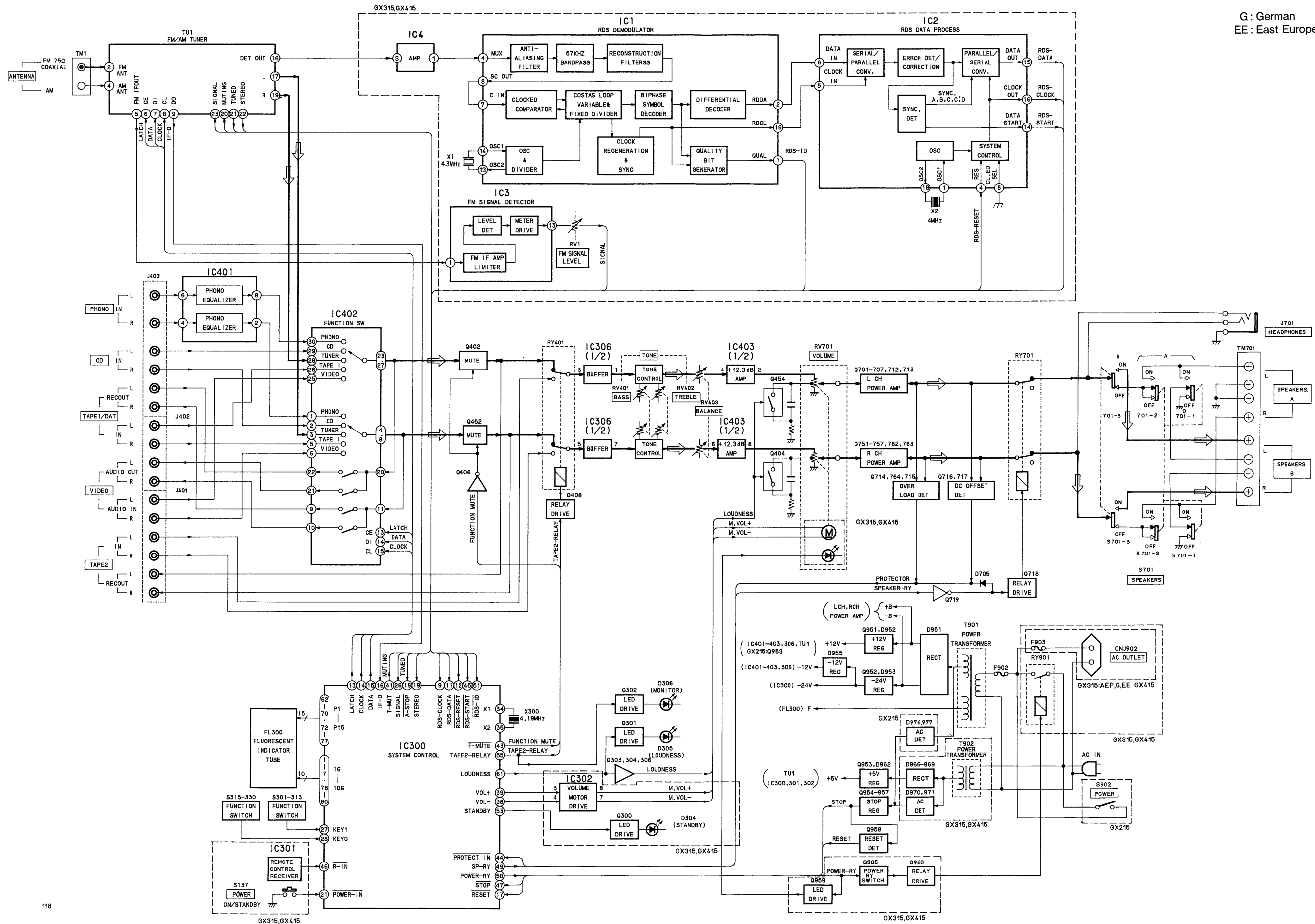
• IC300 SYSTEM CONTROL IC (μ PD78043GF-SOX4072)

PIN No.	I/O	PIN NAME	FUNCTION
1	O	7G	Drives indicator tube.
2	O	6G	Drives indicator tube.
3	O	5G	Drives indicator tube.
4	O	4G	Drives indicator tube.
5	O	3G	Drives indicator tube.
6	O	2G	Drives indicator tube.
7	O	1G	Drives indicator tube.
8	—	V _{DD}	5V
9	I	RDS-CLOCK	RDS CLOCK input.
10		NC	
11	I	RDS-DATA	RDS DATA input.
12	O	RDS-RESET	RESET output for LC7073M.
13	O	LATCH	} FUNCTION output for tuner.
14	O	CLOCK	
15	O	DATA	
16		IF-D	IF COUNT DATA input.
17	I	$\overline{\text{RESET}}$	System RESET input.
18	I	$\overline{\text{A-STOP}}$	TUNED input.
19	I	$\overline{\text{STEREO}}$	"L" when STEREO is received.
20	—	GND	
21	I	$\overline{\text{POWER IN}}$	POWER ON/OFF input.
22	I	FUNC SEL	Fixed "L".
23	I	FUN 2	Input for detecting motor FUNCTION position.
24	I	FUN 1	Input for detecting motor FUNCTION position.
25	I	FUN 0	Input for detecting motor FUNCTION position.
26	I	SIGNAL	SIGNAL input.
27	I	KEY 1	KEY input port.
28	I	KEY 0	KEY input port.
29	—	A/D V _{DD}	A/D converter power supply.
30	I	A/D REF	A/D converter power supply reference voltage.
31	—	GND	
32		NC	
33	—	GND	
34	I	X1	Oscillation signal input (4.19MHz).
35	O	X2	Oscillation signal output (4.19MHz).
36	O	FUN CCW	Operates the motor for motor FUNCTION.
37	O	FUN CW	Operates the motor for motor FUNCTION.
38	O	VOL—	Motor for VOL. "H" when DOWN.
39	O	VOL+	Motor for VOL. "H" when UP.
40	—	GND	

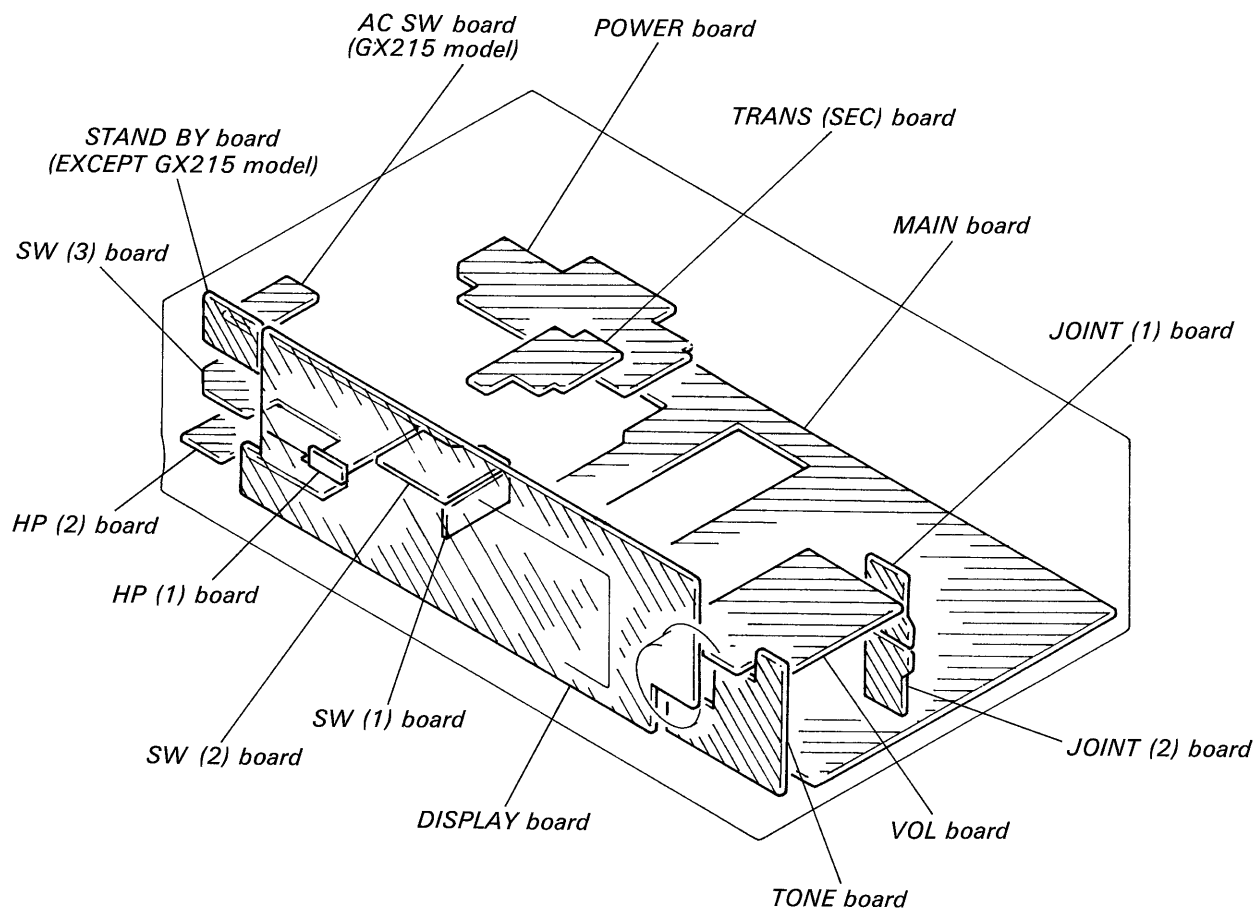
PIN No.	I/O	PIN NAME	FUNCTION
41	O	T-MUT	TUNER MUTE output.
42	O	P-MUT	PROTECT MUTE output.
43	O	F-MUT	FUNCTION MUTE output.
44	I	PROTECT IN	PROTECT detection input.
45	I	RDS-START	RDS DATA START pin.
46	I	R-IN	Remote commander input.
47	I	STOP	Power ON/OFF Monitor.
48		NC	Fixed "L".
49		SP-RY	Activates SPEAKER RELAY.
50	O	POWER RY	Activates POWER RELAY.
51	I	RDS-ID	RDS-ID detection input.
52	–	V _{DD}	5V
53	O	STANBY	Activates standby LED.
54	O	VOL-LED	Activates VOL-LED.
55	O	TAPE2-RELAY	Activates TAPE 2 relay.
56	O	S-DIRECT-RELAY	Activates source direct relay.
57	I	S2	Destination change – over input “H” : East European “L” : AEP, G, UK
58	I	S1	Model change – over input “H” : GX215 “L” : GX315, GX415
59	–	S5	Fixed “L”.
60	–	S4	Fixed “L”.
61		LOUDNESS	LOUDNESS CONTROL output.
62	O	P15	Drives indicator tube.
63	O	P14	Drives indicator tube.
64	O	P13	Drives indicator tube.
65	O	P12	Drives indicator tube.
66	O	P11	Drives indicator tube.
67	O	P10	Drives indicator tube.
68	O	P9	Drives indicator tube.
69	O	P8	Drives indicator tube.
70	O	P7	Drives indicator tube.
71	–	– 24V	– 24V
72	O	P6	Drives indicator tube.
73	O	P5	Drives indicator tube.
74	O	P4	Drives indicator tube.
75	O	P3	Drives indicator tube.
76	O	P2	Drives indicator tube.
77	O	P1	Drives indicator tube.
78	O	10G	Drives indicator tube.
79	O	9G	Drives indicator tube.
80	O	8G	Drives indicator tube.

3-2. BLOCK DIAGRAM

G : German
EE : East European

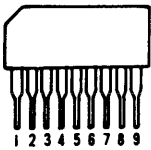


3-3. CIRCUIT BOARDS LOCATION

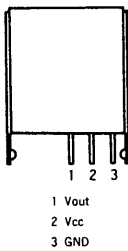


3-4. SEMICONDUCTOR LEAD LAYOUTS

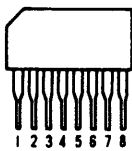
BA6208
μPC4570HA-1



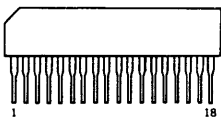
G1U58XB



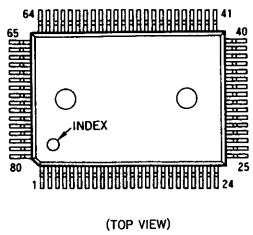
M5218AL



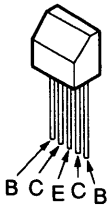
RBA-402



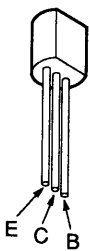
μPD78043GF-SOX4072



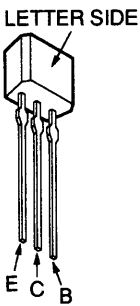
2SA979-FG



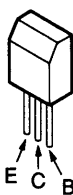
2SA988-PAFAEA



2SA1175-HFE
2SC2785-HFE
2SC3623A-LK
DTA124ES
DTC114TS



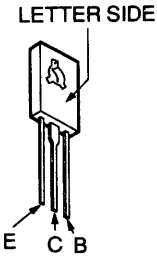
2SA1221-K
2SC2958



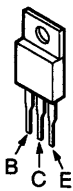
2SB734-34
2SB1375-LC
2SB1560-OPY
2SB1587-OPY
2SD2390-OPY
2SD2438-OPY



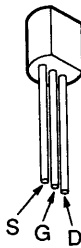
2SD809-K



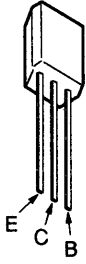
2SD2012



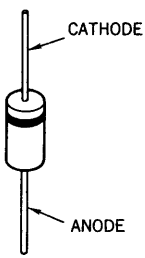
2SK246-GR3



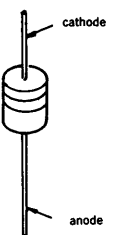
DTC124ES



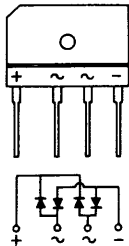
11ES2-NTA2B
1N4148M
1S1585
HZS4ALL
UZ-12BSB
UZ-13BSB



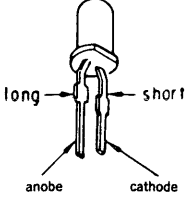
HZS6C3L
UZL-24L
UZ-4.3BSB
UZ-6.2BSC



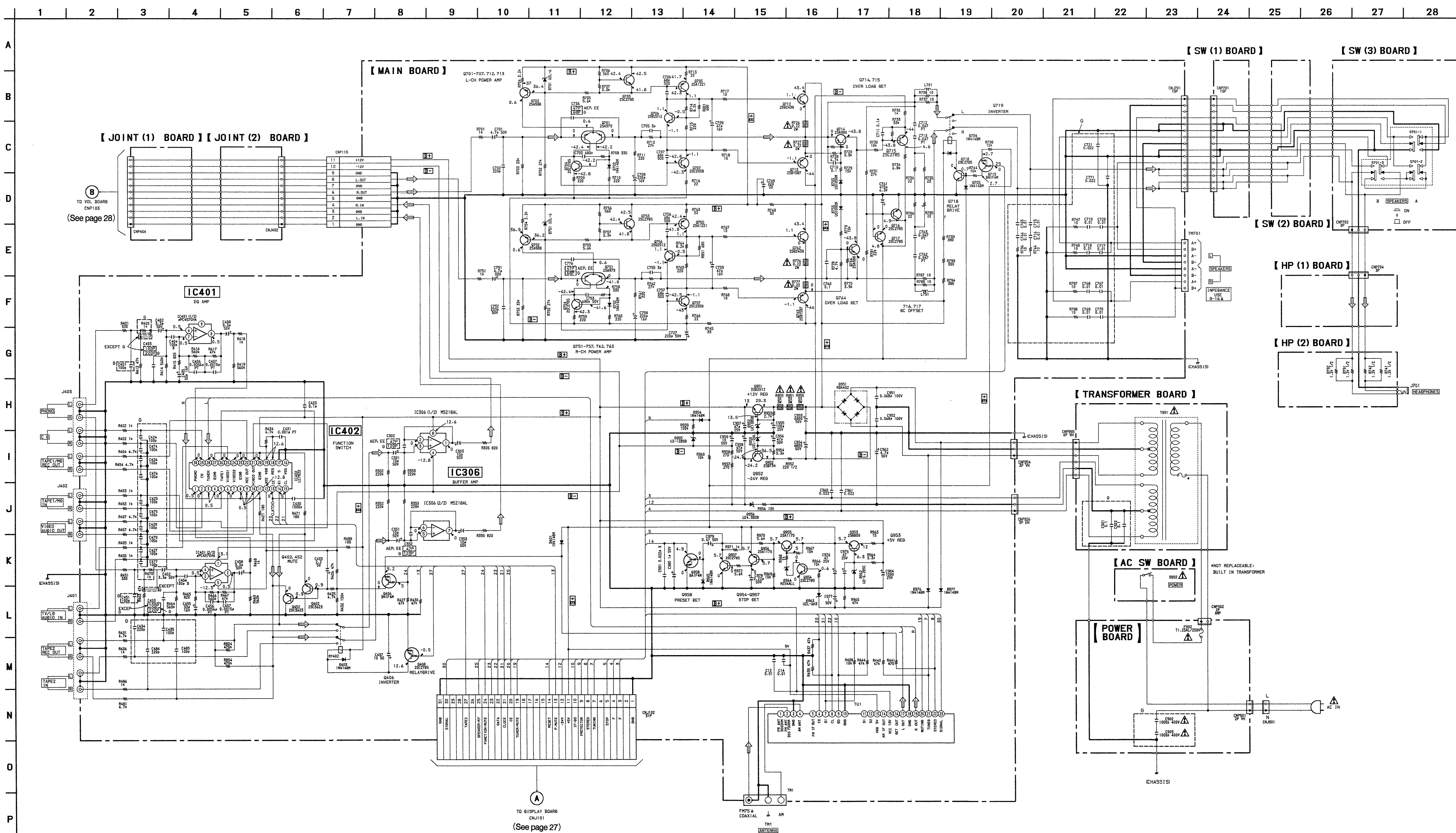
RBV-602-01



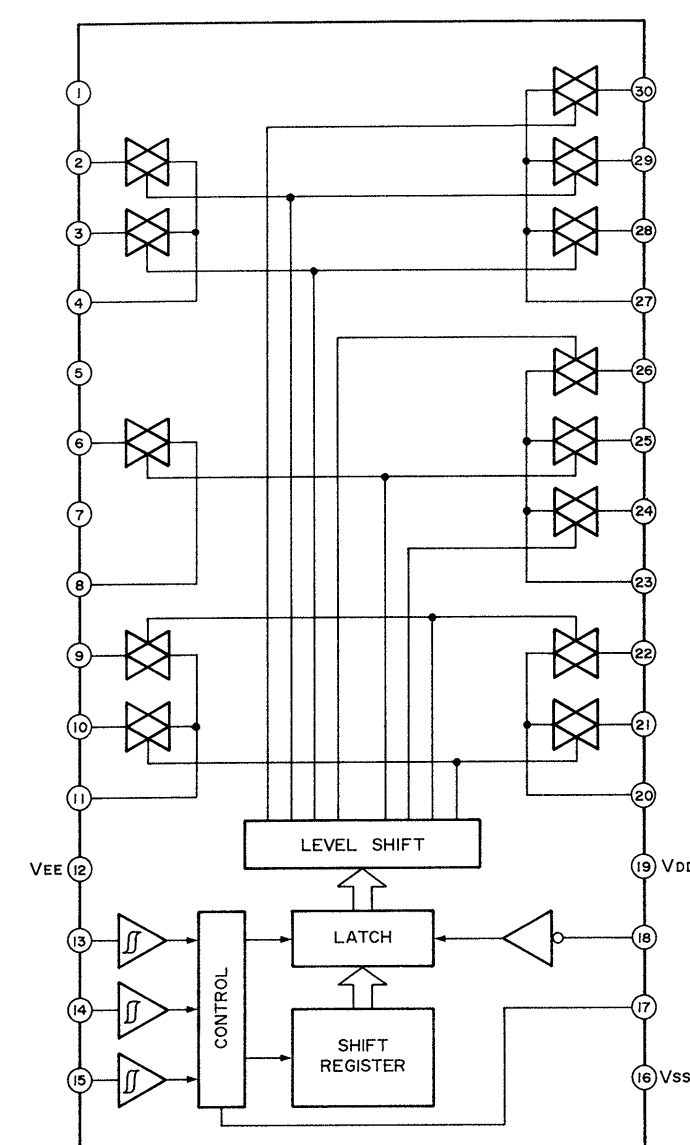
SEL3210S-CD
SEL3810A-CD



3-5. SCHEMATIC DIAGRAM —MAIN (GX215) Section—



● IC Block Diagram
IC402 LC7822



Note:

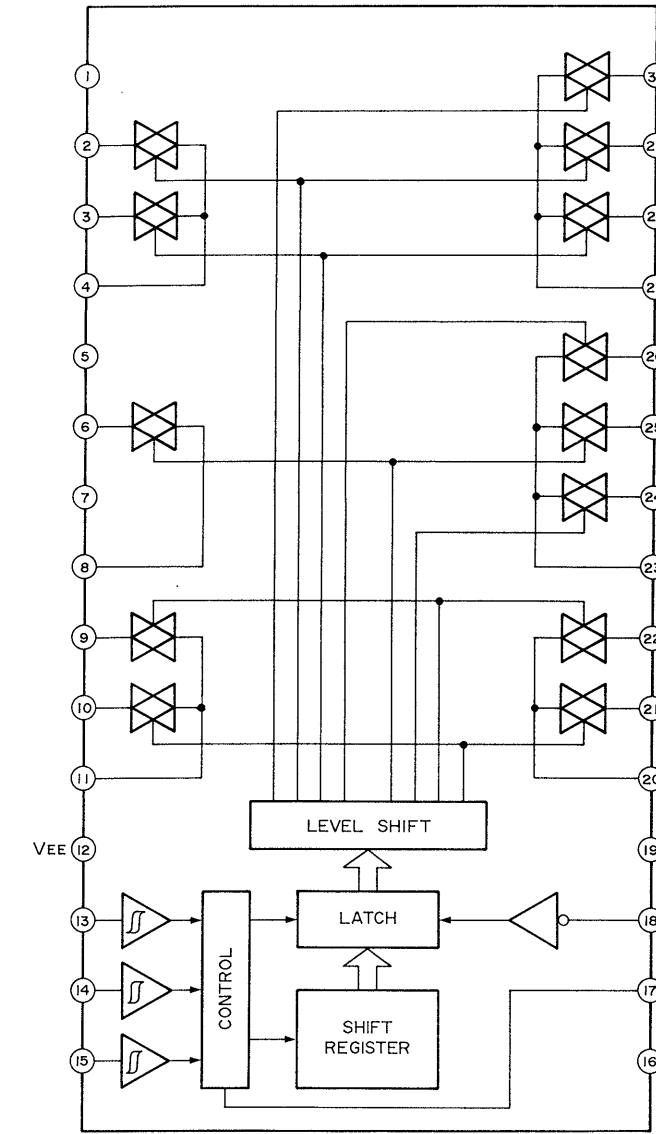
- All capacitors are in μF unless otherwise noted. pF : μF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{4}\text{W}$ or less unless otherwise specified.
- Δ : internal component.
- \square : nonflammable resistor.

Note: The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

- \square : B+ Line
- \square : B- Line
- Voltage is dc with respect to ground under no-signal (detuned) conditions.
- Voltages are taken with a VOM (input impedance 10M Ω). Voltage variations may be noted due to normal production tolerances.
- Signal path.
- \rightarrow : FM
- Abbreviations
G: German
EE: East European

● IC Block Diagrams

IC402 LC7822

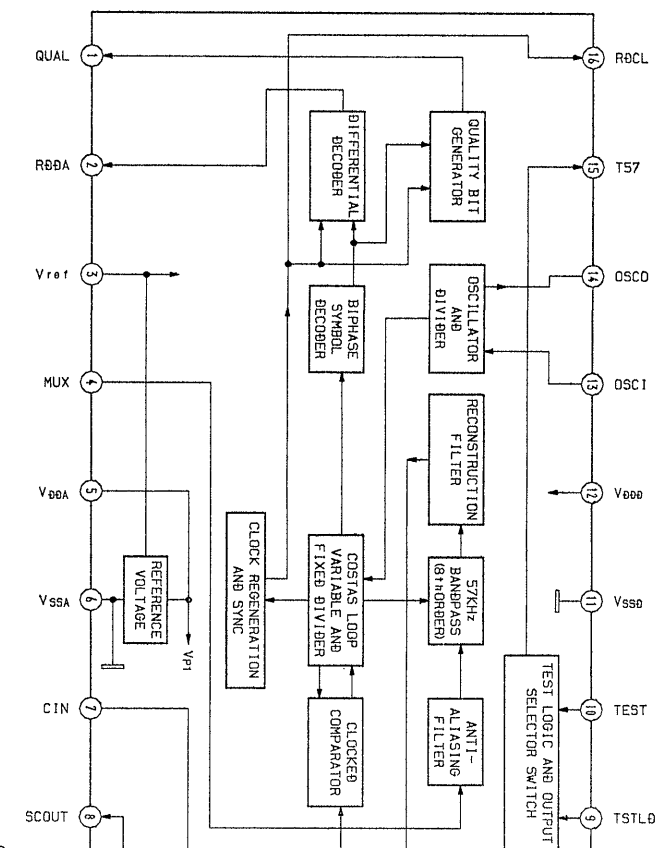


- Note:**
- All capacitors are in μF unless otherwise noted. pF : μF F 50WV or less are not indicated except for electrolytics and tantalums.
 - All resistors are in Ω and $\frac{1}{4}\text{W}$ or less unless otherwise specified.
 - Δ : internal component.
 - \square : nonflammable resistor.

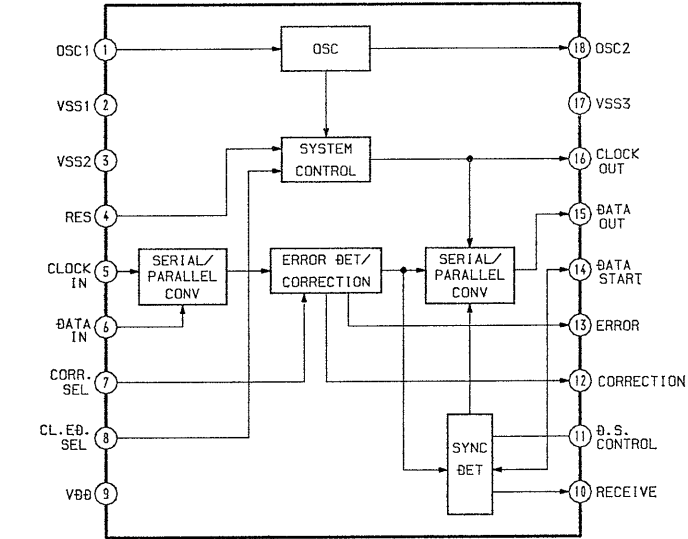
Note: The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

- \square : B+ Line
- \square : B- Line
- \square : adjustment for repair.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions. no mark: GX415 or common (): GX315
- Voltages are taken with a VOM (Input Impedance 10M Ω). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with an oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
- \rightarrow : FM
- Abbreviations
G : German
EE : East European

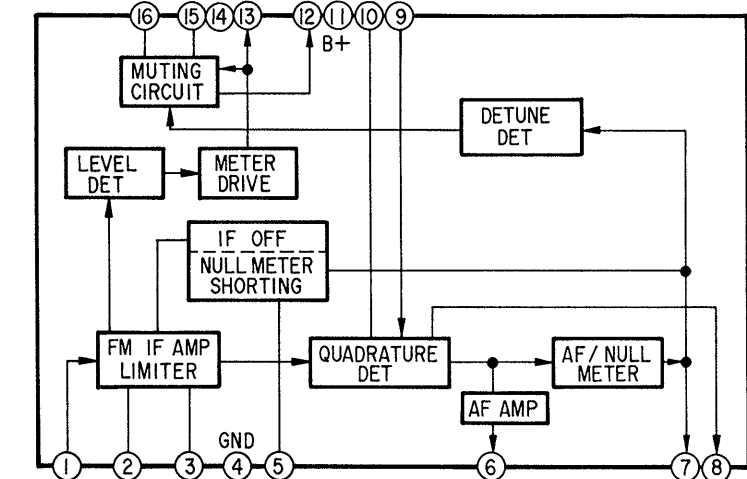
IC1 SAA6579T



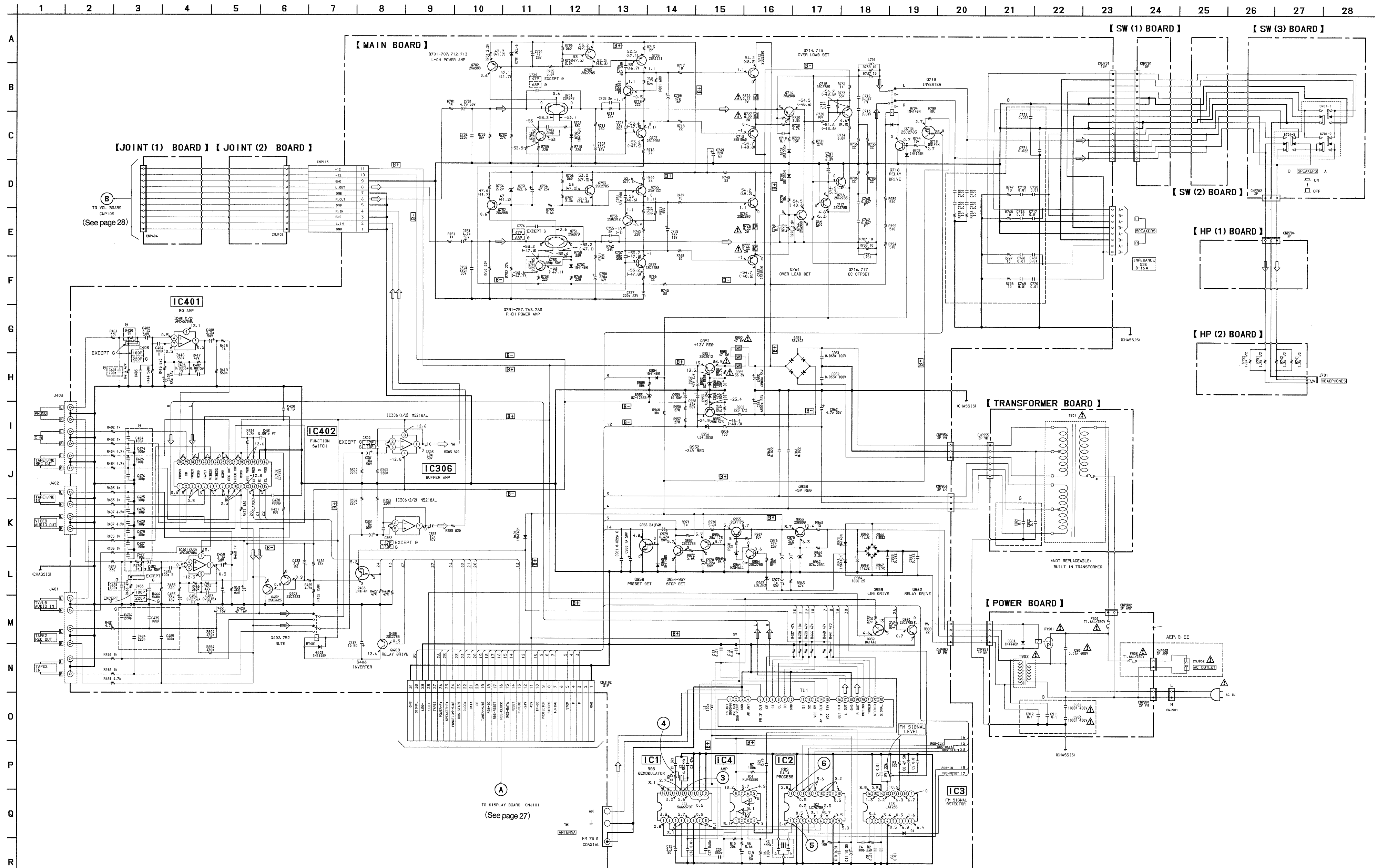
IC2 LC7073M



IC3 LA1235

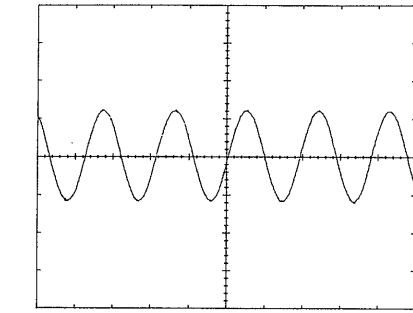


3-6. SCHEMATIC DIAGRAM —MAIN (GX315, GX415) Section—

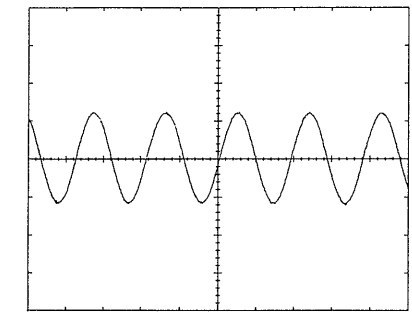


● Waveforms

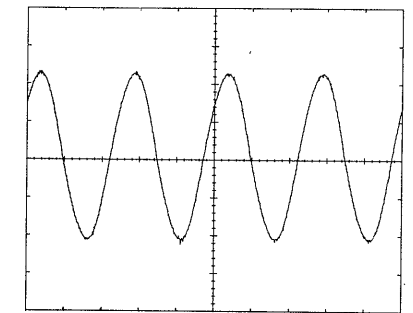
③ IC1 ⑬ 4.33MHz 14.5mV



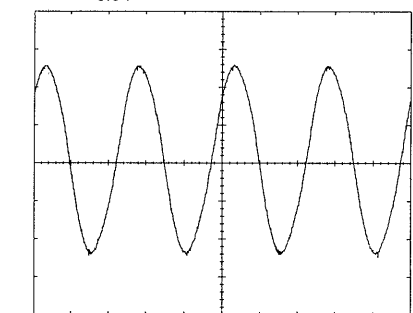
④ X1 4.33MHz 25mV

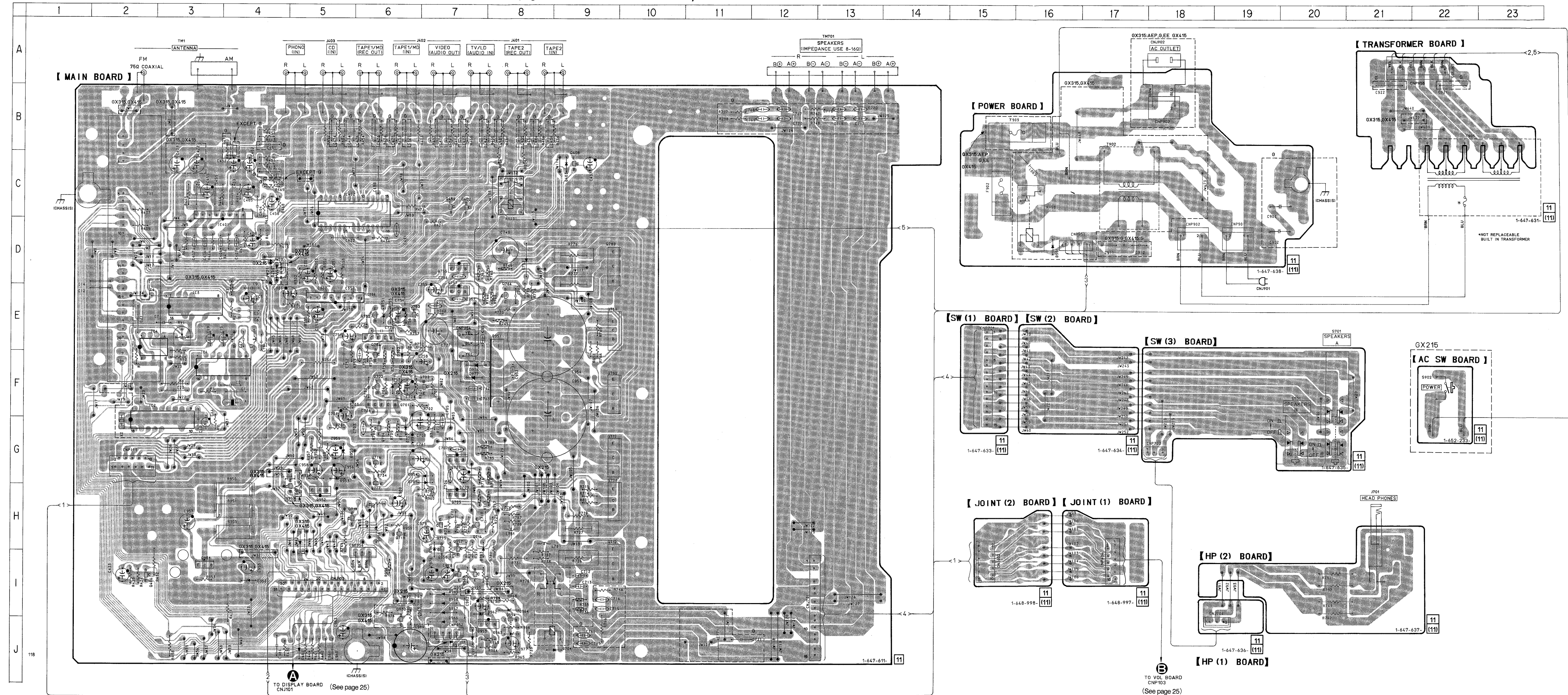


⑤ IC2 ① 4.0MHz 4.4V



⑥ IC2 ⑧ 4.0MHz 5.0V





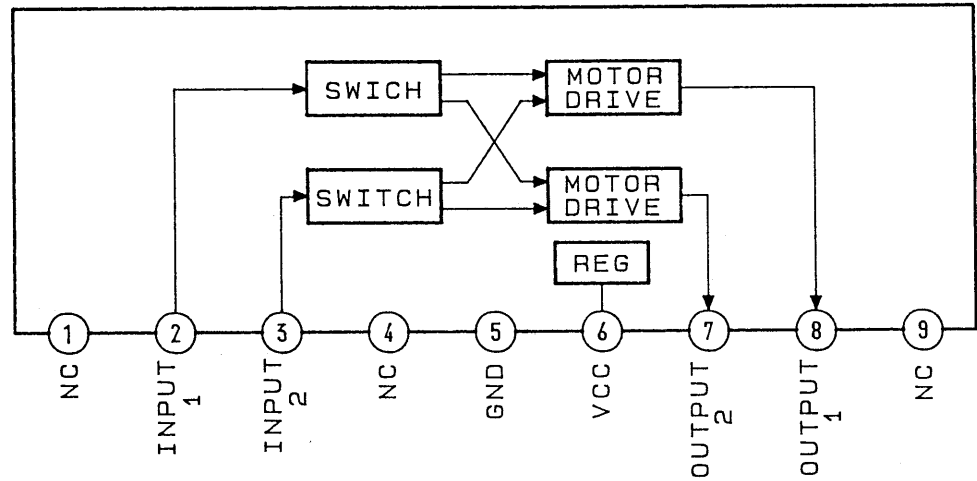
• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D1	H-5	Q402	C-7
D401	J-5	Q406	I-2
D403	C-9	Q408	C-9
D701	F-6	Q452	C-7
D702	G-6	Q701	F-6
D703	I-7	Q702	F-6
D704	J-9	Q703	F-7
D705	G-7	Q704	G-6
D751	E-6	Q705	H-7
D752	F-6	Q706	H-9
D753	D-8	Q707	G-7
D901	D-16	Q712	I-9
D951	F-8	Q713	G-9
D952	I-4	Q714	H-7
D953	G-5	Q715	H-7
D954	G-7	Q716	G-6
D955	G-5	Q717	G-6
D956	H-6	Q718	H-6
D962	I-7	Q719	H-5
D963	J-8	Q751	E-6
D964	I-8	Q752	E-6
D965	I-7	Q753	E-6
D966	J-7	Q754	F-6
D967	I-7	Q755	D-7
D968	I-7	Q756	E-9
D969	I-7	Q757	E-7
D970	J-7	Q762	F-9
D971	J-7	Q763	D-9
D976	F-7	Q764	E-8
D977	F-7	Q951	I-3
		Q952	H-5
IC1	F-3	Q953	J-8
IC2	G-3	Q954	J-8
IC3	E-3	Q955	I-7
IC4	E-2	Q956	I-7
IC306	E-5	Q957	H-7
IC401	C-3	Q958	H-7
IC402	C-5	Q959	H-5
		Q960	J-6

Note:
• — : parts extracted from the component side.
• — : parts extracted from the conductor side.
• Abbreviations
G : German
EE : East European

● IC Block Diagrams

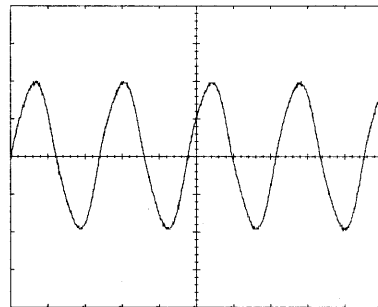
IC302 BA6208



● Waveforms

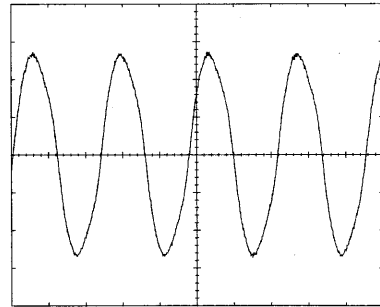
① IC300 ⑧

4.19 MHz
3.9V



② IC300 ⑨

4.19 MHz
5.3V



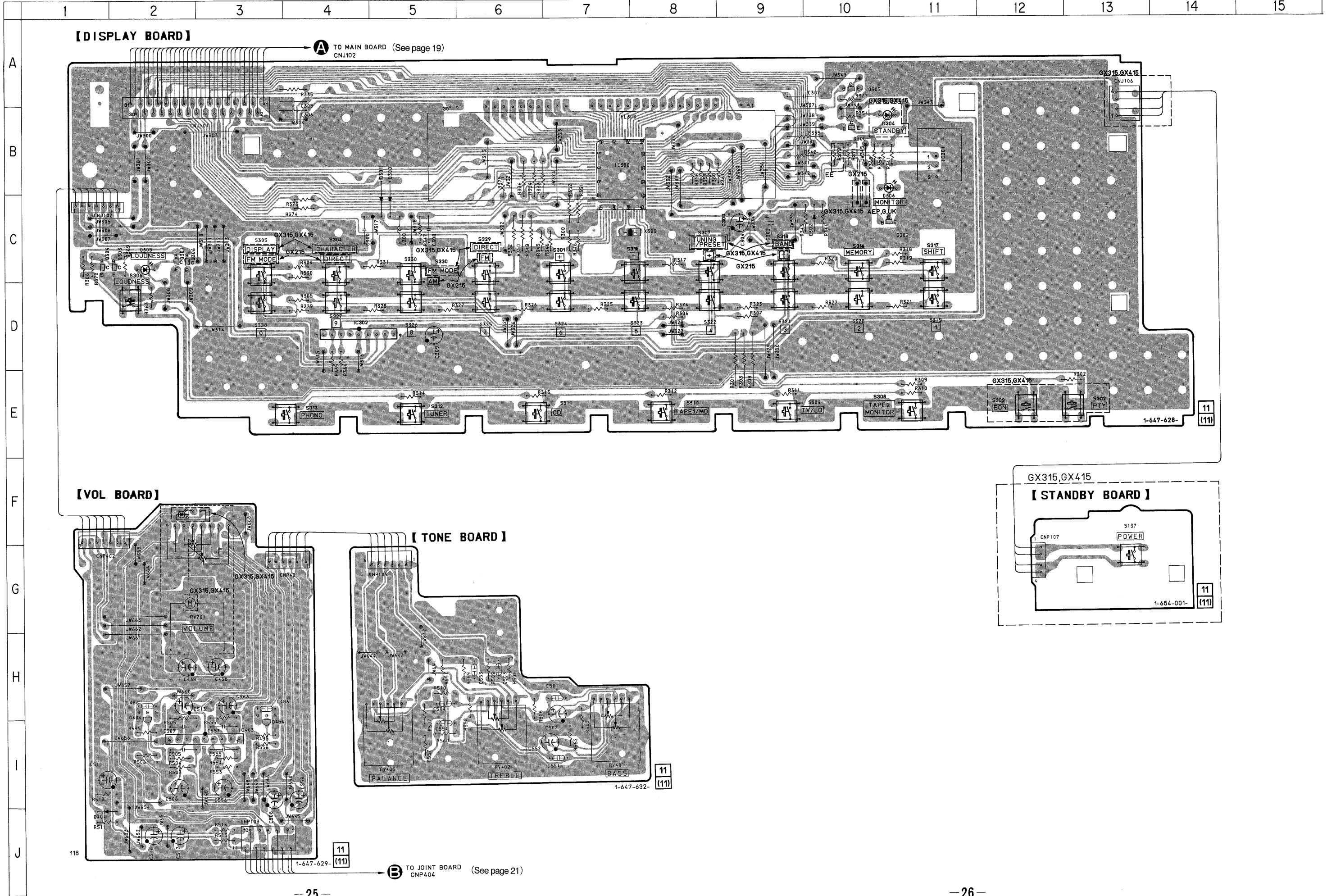
● Semiconductor Location

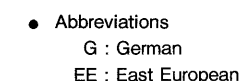
Ref. No.	Location
D300	C - 5
D301	C - 5
D302	C - 10
D304	B - 10
D305	C - 2
D306	B - 10
D404	J - 1
IC300	B - 7
IC301	B - 11
IC302	D - 4
IC403	I - 3
Q300	B - 10
Q301	C - 2
Q302	C - 10
Q303	C - 2
Q304	C - 1
Q305	A - 10
Q306	C - 2
Q404	I - 2
Q454	I - 3

Note:

- : parts extracted from the component side.
- : parts extracted from the conductor side.
- Abbreviations
G : German
EE : East European

3-8. PRINTED WIRING BOARDS—DISPLAY Section— ● See page 9 for Circuit Boards Location. ● See page 10 for Semiconductor Lead Layouts.





SECTION 4
EXPLODED VIEWS

NOTE:



- -xx,-x mean standardized parts, so they may have some differences from the original one.

- Color Indication of Appearance Parts
Example:

KNOB, BALANCE (WHITE)...(RED)

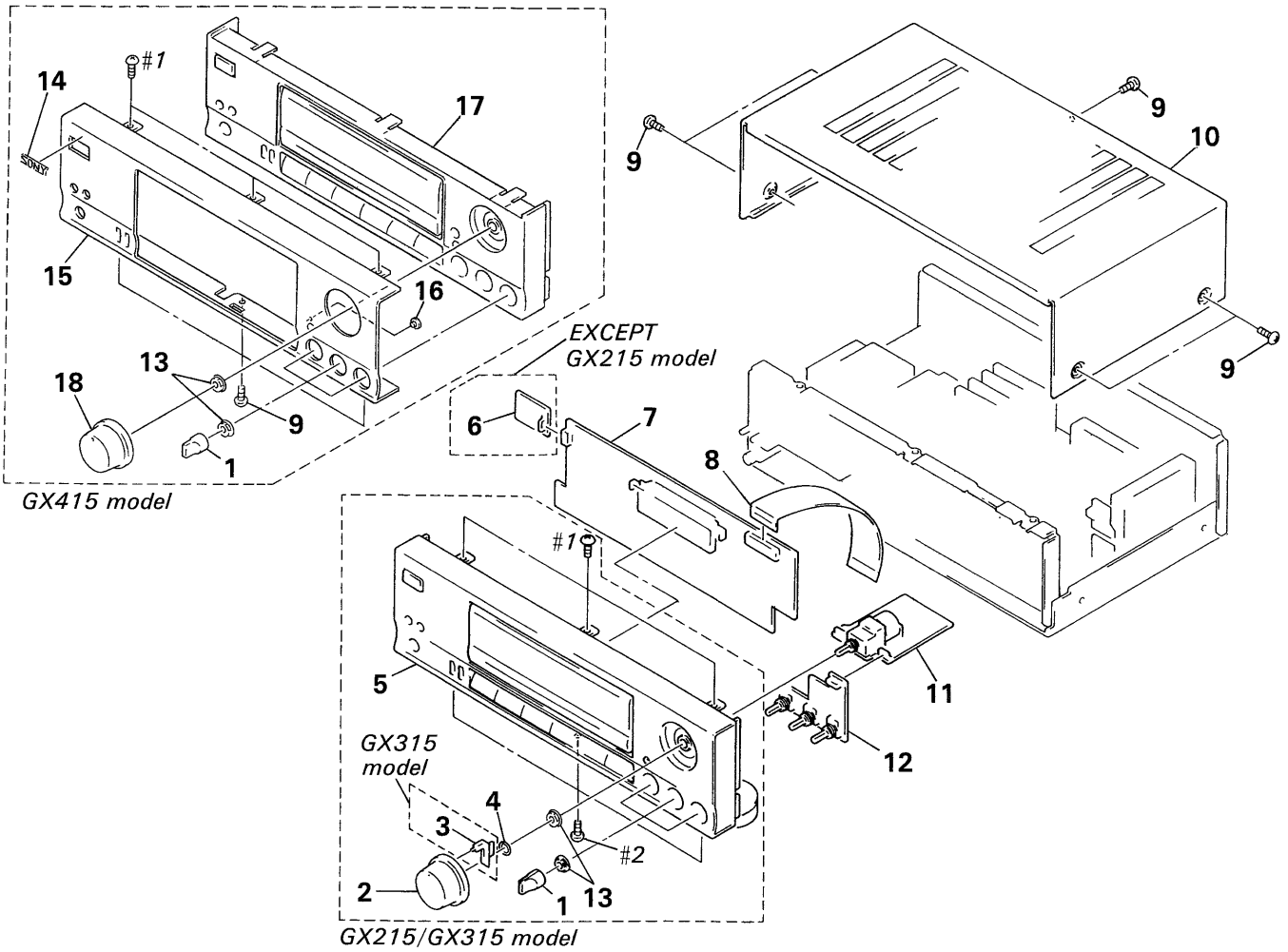
↑ ↑
Parts color Cabinet's color

- Items marked “*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (#mark) list and accessories and packing materials are given in the last of this parts list.
- Abbreviations
G : German EE : East European

The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

Note:
There are two type of AEP models which are depend on countries.
AEP2 : Model for Scandinavian countries, Switzerland, Spain and Portugal.
AEP1 : Model for other European countries.

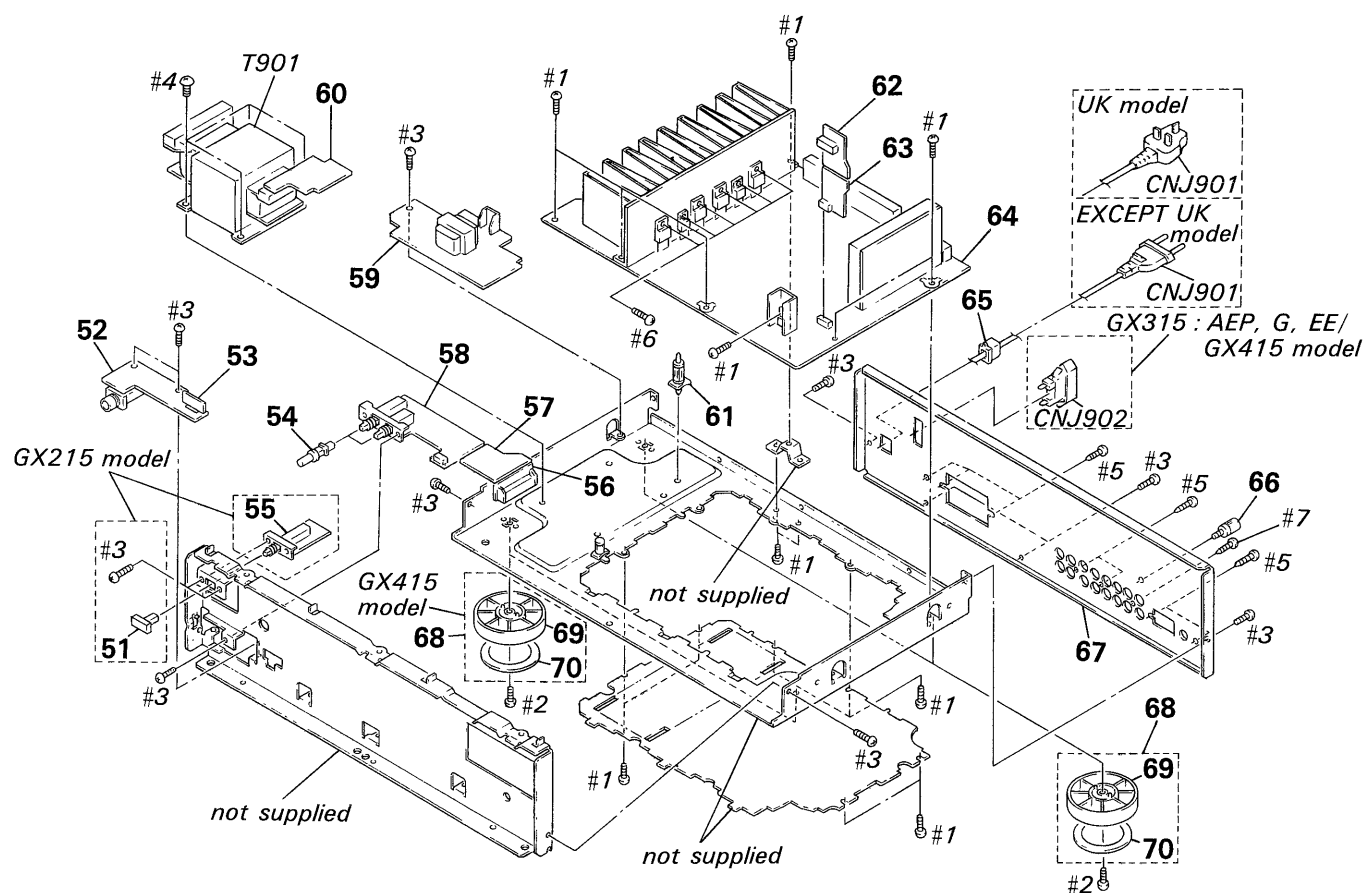
4-1. CABINET SECTION





Ref.No.	Part No.	Description	Remark
1	4-957-383-01	KNOB (F14)	
2	4-949-659-01	KNOB (VOL-NEW) (GX315)	
2	4-949-659-11	KNOB (VOL-NEW) (GX215)	
3	4-958-991-01	PLATE (VOL), LIGHT GUIDE (GX315)	
4	3-350-426-01	SPRING, RING (GX215/GX315)	
5	X-4944-688-1	PANEL ASSY, FRONT (GX315)	
5	X-4944-689-1	PANEL ASSY, FRONT (GX215)	
6	1-654-001-11	STANDBY BOARD (EXCEPT GX215)	
*7	A-4369-553-A	DISPLAY BOARD, COMPLETE (GX215:EE)	
*7	A-4369-555-A	DISPLAY BOARD, COMPLETE (GX215:AEP, G)	
*7	A-4369-559-A	DISPLAY BOARD, COMPLETE (GX315:EE)	
*7	A-4369-561-A	DISPLAY BOARD, COMPLETE (GX315:AEP, UK, G/ GX415)	

Ref.No.	Part No.	Description	Remark
8	1-696-456-11	WIRE (FLAT TYPE) (31 CORE)	
9	3-704-366-01	SCREW (CASE) (M3X8)	
*10	4-951-795-01	CASE	
*11	A-4369-228-A	VOL BOARD, COMPLETE (GX315)	
*11	A-4369-558-A	VOL BOARD, COMPLETE (GX215)	
*11	A-4369-562-A	VOL BOARD, COMPLETE (GX415)	
*12	1-647-632-11	TONE BOARD	
13	3-575-039-00	NUT, CONTROL	
14	4-942-568-01	EMBLEM (NO.5), SONY (GX415)	
15	4-965-079-01	PANEL, FRONT (GX415)	
16	4-965-084-01	INDICATOR (A) (GX415)	
17	X-4944-690-1	BASE ASSY, PANEL (GX415)	
18	X-4944-691-1	KNOB (R48) ASSY (GX415)	

4-2. CHASSIS SECTION



The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
51	4-917-460-01	KNOB, POWER (GX215)	
* 52	1-647-637-11	HP (2) BOARD	
* 53	1-647-636-11	HP (1) BOARD	
54	4-951-801-01	BUTTON (S)	
* 55	1-652-233-11	AC SW BOARD (GX215)	
* 56	1-647-633-11	SW (1) BOARD	
* 57	1-647-634-11	SW (2) BOARD	
* 58	1-647-635-11	SW (3) BOARD	
* 59	1-647-638-11	POWER BOARD	
* 60	1-647-631-11	TRANSFORMER BOARD	
* 61	4-924-098-31	HOLDER, PC BOARD	
* 62	1-648-997-11	JOINT (1) BOARD	
* 63	1-648-998-11	JOINT (2) BOARD	
* 64	A-4369-227-A	MAIN BOARD, COMPLETE (GX415:G)	
* 64	A-4369-229-A	MAIN BOARD, COMPLETE (GX315:G)	
* 64	A-4369-230-A	MAIN BOARD, COMPLETE (GX215:AEP)	
* 64	A-4369-554-A	MAIN BOARD, COMPLETE (GX215:EE)	
* 64	A-4369-560-A	MAIN BOARD, COMPLETE (GX315:EE)	
* 64	A-4369-563-A	MAIN BOARD, COMPLETE (GX415:AEP)	
* 64	A-4369-564-A	MAIN BOARD, COMPLETE (GX315:AEP, UK)	
* 64	A-4369-578-A	MAIN BOARD, COMPLETE (GX215:G)	

Ref.No.	Part No.	Description	Remark
*65	3-703-244-00	BUSHING (2104), CORD	
66	4-947-010-01	SCREW, FEEDER FIXED	
*67	4-965-078-11	PANEL, BACK (GX315:AEP2, EE)	
*67	4-965-078-21	PANEL, BACK (GX315:G)	
*67	4-965-078-31	PANEL, BACK (GX315:UK)	
*67	4-965-078-41	PANEL, BACK (GX215:AEP1/GX315:AEP1)	
*67	4-965-078-51	PANEL, BACK (GX215:AEP2, EE)	
*67	4-965-078-61	PANEL, BACK (GX215:G)	
*67	4-965-080-01	PANEL, BACK (GX415:AEP1)	
*67	4-965-080-11	PANEL, BACK (GX415:AEP2)	
*67	4-965-080-21	PANEL, BACK (GX415:G)	
68	X-4941-292-1	FOOT ASSY (F58175S)	
69	3-318-688-31	FOOT (F58175S)	
70	4-923-836-21	CUSHION	
△CNJ901	1-696-570-21	CORD, POWER (UK)	
△CNJ901	1-575-651-11	CORD, POWER (EXCEPT UK)	
△CNJ902	1-526-794-11	OUTLET, AC (GX315:AEP, G, EE/GX415)	
△T901	1-426-733-11	TRANSFORMER, POWER (GX215)	
△T901	1-426-734-11	TRANSFORMER, POWER (GX315:AEP, G, EE)	
△T901	1-426-735-11	TRANSFORMER, POWER (GX415)	
△T901	1-426-986-11	TRANSFORMER, POWER (GX315:UK)	

SECTION 5 ELECTRICAL PARTS LIST

AC SW

DISPLAY

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
All resistors are in ohms.
METAL: Metal-film resistor.
METAL OXIDE: Metal oxide-film resistor.
F: nonflammable

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
In each case, u: μ , for example:
uA...: μ A..., uPA...: μ PA..., uPB...: μ PB...,
uPC...: μ PC..., uPD...: μ PD...
- CAPACITORS
uF: μ F
uH: μ H
- COILS
uH: μ H
- Abbreviations
G: German EE: East European

The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

Note:

There are two type of AEP models which are depend on countries.
AEP2: Model for Scandinavian countries, Switzerland, Spain and Portugal.
AEP1: Model for other European countries.

When indicating parts by reference number, please include the board.

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
*	1-652-233-11	AC SW BOARD (GX215) *****				< FLUORESCENT INDICATOR TUBE >	
		< SWITCH >		FL300	1-517-141-11	INDICATOR TUBE, FLUORESCENT	
						< IC >	
Δ S902	1-572-267-21	SWITCH, PUSH (AC POWER) (1 KEY) (POWER) (GX215) *****		IC300	8-759-284-81	IC uPD78043GF-SOX4072	
				IC301	8-749-923-11	IC GP1U58XB (GX315/GX415)	
				IC302	8-759-962-08	IC BA6208 (GX315/GX415)	
*	A-4369-553-A	DISPLAY BOARD, COMPLETE (GX215:EE)				< COIL >	
*	A-4369-555-A	DISPLAY BOARD, COMPLETE (GX215:AEP, G)		L300	1-410-509-11	INDUCTOR 10uH	
*	A-4369-559-A	DISPLAY BOARD, COMPLETE (GX315:EE)				< TRANSISTOR >	
*	A-4369-561-A	DISPLAY BOARD, COMPLETE (GX315:AEP, G, UK/ GX415) *****		Q300	8-729-119-78	TRANSISTOR 2SC2785-HFE (GX315/GX415)	
		< CAPACITOR >		Q301	8-729-900-36	TRANSISTOR DTC124ES	
C300	1-161-379-00	CERAMIC 0.01uF 20% 25V (GX315/GX415)		Q302	8-729-119-78	TRANSISTOR 2SC2785-HFE	
C302	1-104-905-11	CAP, DOUBLE LAYERS 0.22F		Q303	8-729-900-36	TRANSISTOR DTC124ES	
C303	1-161-379-00	CERAMIC 0.01uF 20% 25V		Q304	8-729-900-36	TRANSISTOR DTC124ES	
C304	1-126-301-11	ELECT 1uF 20% 50V		Q305	8-729-900-63	TRANSISTOR DTA124ES (GX315/GX415)	
C305	1-164-159-11	CERAMIC 0.1uF 50V		Q306	8-729-900-63	TRANSISTOR DTA124ES	
						< RESISTOR >	
C306	1-164-159-11	CERAMIC 0.1uF 50V		R300	1-249-419-11	CARBON 1.5K 5% 1/4W	
C307	1-161-379-00	CERAMIC 0.01uF 20% 25V		R301	1-247-807-31	CARBON 100 5% 1/4W	
C308	1-161-379-00	CERAMIC 0.01uF 20% 25V		R302	1-249-406-11	CARBON 120 5% 1/4W	
C309	1-126-157-11	ELECT 10uF 20% 16V (GX315/GX415)		R303	1-249-406-11	CARBON 120 5% 1/4W	
		< CONNECTOR >		R304	1-247-811-31	CARBON 150 5% 1/4W	
*CNJ101	1-568-873-11	SOCKET, CONNECTOR 31P		R305	1-249-408-11	CARBON 180 5% 1/4W	
*CNJ102	1-566-969-11	HOUSING, CONNECTOR(PC BOARD)7P		R306	1-249-409-11	CARBON 220 5% 1/4W	
*CNJ106	1-565-480-11	CONNECTOR, BOARD TO BOARD 4P (GX315/GX415)		R307	1-249-410-11	CARBON 270 5% 1/4W	
		< DIODE >		R308	1-249-411-11	CARBON 330 5% 1/4W	
D300	8-719-024-99	DIODE 11ES2-NTA2B		R309	1-249-413-11	CARBON 470 5% 1/4W	
D301	8-719-987-63	DIODE 1N4148M		R310	1-249-414-11	CARBON 560 5% 1/4W	
D302	8-719-987-63	DIODE 1N4148M		R311	1-249-416-11	CARBON 820 5% 1/4W	
D304	8-719-313-69	LED SEL3210S-CD (STANDBY) (GX315/GX415)		R312	1-249-418-11	CARBON 1.2K 5% 1/4W	
D305	8-719-313-72	LED SEL3810A-CD (LOUNDNESS)		R313	1-249-421-11	CARBON 2.2K 5% 1/4W	
				R314	1-249-424-11	CARBON 3.9K 5% 1/4W	
D306	8-719-313-72	LED SEL3810A-CD (MONITOR)		R316	1-249-419-11	CARBON 1.5K 5% 1/4W	
				R317	1-247-807-31	CARBON 100 5% 1/4W	

DISPLAY

Ref.No.	Part No.	Description	Remark		
R318	1-249-406-11	CARBON	120	5%	1/4W
R319	1-249-406-11	CARBON	120	5%	1/4W
R320	1-247-811-31	CARBON	150	5%	1/4W
R321	1-249-408-11	CARBON	180	5%	1/4W
R322	1-249-409-11	CARBON	220	5%	1/4W
R323	1-249-410-11	CARBON	270	5%	1/4W
R324	1-249-411-11	CARBON	330	5%	1/4W
R325	1-249-413-11	CARBON	470	5%	1/4W
R326	1-249-414-11	CARBON	560	5%	1/4W
R327	1-249-416-11	CARBON	820	5%	1/4W
R328	1-249-418-11	CARBON	1.2K	5%	1/4W
R329	1-249-421-11	CARBON	2.2K	5%	1/4W
R330	1-249-424-11	CARBON	3.9K	5%	1/4W
R331	1-249-430-11	CARBON	12K	5%	1/4W
R332	1-249-437-11	CARBON	47K	5%	1/4W
R333	1-247-807-31	CARBON	100	5%	1/4W
R334	1-247-807-31	CARBON	100	5%	1/4W
R335	1-247-807-31	CARBON	100	5%	1/4W
R336	1-247-807-31	CARBON	100	5%	1/4W
R341	1-247-807-31	CARBON	100	5%	1/4W (GX315/ GX415)
R342	1-247-807-31	CARBON	100	5%	1/4W (GX315/ GX415)
R343	1-249-401-11	CARBON	47	5%	1/4W
R344	1-249-417-11	CARBON	1K	5%	1/4W
R345	1-247-895-00	CARBON	470K	5%	1/4W
R346	1-249-437-11	CARBON	47K	5%	1/4W
R347	1-249-429-11	CARBON	10K	5%	1/4W
R349	1-249-437-11	CARBON	47K	5%	1/4W
R350	1-249-437-11	CARBON	47K	5%	1/4W
R351	1-249-437-11	CARBON	47K	5%	1/4W
R352	1-249-437-11	CARBON	47K	5%	1/4W
R354	1-249-411-11	CARBON	330	5%	1/4W (GX315/ GX415)
R355	1-249-429-11	CARBON	10K	5%	1/4W
R356	1-249-437-11	CARBON	47K	5%	1/4W
R357	1-249-437-11	CARBON	47K	5%	1/4W
R358	1-249-411-11	CARBON	330	5%	1/4W
R360	1-249-437-11	CARBON	47K	5%	1/4W
R361	1-249-429-11	CARBON	10K	5%	1/4W
R363	1-249-411-11	CARBON	330	5%	1/4W
R364	1-249-437-11	CARBON	47K	5%	1/4W (GX315/ GX415)
R365	1-249-437-11	CARBON	47K	5%	1/4W (GX315/ GX415)
R366	1-249-417-11	CARBON	1K	5%	1/4W
R367	1-249-429-11	CARBON	10K	5%	1/4W (GX315/ GX415)
R368	1-249-429-11	CARBON	10K	5%	1/4W
R369	1-249-429-11	CARBON	10K	5%	1/4W

Ref.No.	Part No.	Description	Remark		
R370	1-249-429-11	CARBON	10K	5%	1/4W
R371	1-249-437-11	CARBON	47K	5%	1/4W (GX215)
R372	1-249-437-11	CARBON	47K	5%	1/4W (EE)
R373	1-249-417-11	CARBON	1K	5%	1/4W (GX315/ GX415)
R374	1-249-417-11	CARBON	1K	5%	1/4W (GX315/ GX415)
R375	1-249-417-11	CARBON	1K	5%	1/4W (GX315/ GX415)
< SWITCH >					
S301	1-554-303-21	SWITCH, TACTILE (+)			
S302	1-554-303-21	SWITCH, TACTILE (GX315/GX415) (PTY)			
S303	1-554-303-21	SWITCH, TACTILE (GX315/GX415) (EON)			
S304	1-554-303-21	SWITCH, TACTILE (GX215:DIRECT) (GX315 /GX415:CHARACTER)			
S305	1-554-303-21	SWITCH, TACTILE (GX215:FM MODE) (GX315/ GX415:DISPLAY)			
S306	1-554-303-21	SWITCH, TACTILE (LOUDNESS)			
S307	1-554-303-21	SWITCH, TACTILE (GX215: +) (GX315/GX415: TUNING/PRESET)			
S308	1-554-303-21	SWITCH, TACTILE (TAPE2 MONITOR)			
S309	1-554-303-21	SWITCH, TACTILE (TV/LD)			
S310	1-554-303-21	SWITCH, TACTILE (TAPE/MD)			
S311	1-554-303-21	SWITCH, TACTILE (CD)			
S312	1-554-303-21	SWITCH, TACTILE (TUNER)			
S313	1-554-303-21	SWITCH, TACTILE (PHONO)			
S315	1-554-303-21	SWITCH, TACTILE (-)			
S316	1-554-303-21	SWITCH, TACTILE (MEMORY)			
S317	1-554-303-21	SWITCH, TACTILE (SHIFT)			
S318	1-554-303-21	SWITCH, TACTILE (GX215: -) (GX315/GX415: BAND)			
S319	1-554-303-21	SWITCH, TACTILE (1)			
S320	1-554-303-21	SWITCH, TACTILE (2)			
S321	1-554-303-21	SWITCH, TACTILE (3)			
S322	1-554-303-21	SWITCH, TACTILE (4)			
S323	1-554-303-21	SWITCH, TACTILE (5)			
S324	1-554-303-21	SWITCH, TACTILE (6)			
S325	1-554-303-21	SWITCH, TACTILE (7)			
S326	1-554-303-21	SWITCH, TACTILE (8)			
S327	1-554-303-21	SWITCH, TACTILE (9)			
S328	1-554-303-21	SWITCH, TACTILE (0)			
S329	1-554-303-21	SWITCH, TACTILE (GX215, FM) (GX315/GX415 DIRECT)			
S330	1-554-303-21	SWITCH, TACTILE (GX215, AM) (GX315/GX415 FM MODE)			
< VIBRATOR >					
X300	1-577-101-11	VIBRATOR, CERAMIC (4.19MHz)			

HP (1)

HP (2)

JOINT (1)

JOINT (2)

MAIN

Ref.No.	Part No.	Description	Remark
*	1-647-636-11	HP (1) BOARD *****	
		< CONNECTOR >	
	CNP704 1-691-160-11	PIN, CONNECTOR 3P *****	
*	1-647-637-11	HP (2) BOARD *****	
		< JACK >	
J701	1-568-151-11	JACK (LARGE TYPE) (HEADPHONES)	
		< RESISTOR >	
R741	1-247-753-11	CARBON 1.2K 5% 1/2W	
R742	1-247-753-11	CARBON 1.2K 5% 1/2W	
R791	1-247-753-11	CARBON 1.2K 5% 1/2W	
R792	1-247-753-11	CARBON 1.2K 5% 1/2W *****	
*	1-648-997-11	JOINT (1) BOARD *****	
		< CONNECTOR >	
	*CNP404 1-750-384-11	CONNECTOR, BOARD TO BOARD 11P *****	
*	1-648-998-11	JOINT (2) BOARD *****	
		< CONNECTOR >	
	*CNJ402 1-750-383-11	CONNECTOR, BOARD TO BOARD 11P *****	
*	A-4369-230-A	MAIN BOARD, COMPLETE (GX215:AEP)	
*	A-4369-578-A	MAIN BOARD, COMPLETE (GX215:G)	
*	A-4369-554-A	MAIN BOARD, COMPLETE (GX215:EE)	
*	A-4369-564-A	MAIN BOARD, COMPLETE (GX315:AEP, UK)	
*	A-4369-229-A	MAIN BOARD, COMPLETE (GX315:G)	
*	A-4369-560-A	MAIN BOARD, COMPLETE (GX315:EE)	
*	A-4369-563-A	MAIN BOARD, COMPLETE (GX415:AEP)	
*	A-4369-227-A	MAIN BOARD, COMPLETE (GX415:G) *****	
*	4-921-941-01	CUSHION (FL)	
*	4-943-107-11	HOLDER (FL TUBE)	
*	4-812-134-00	RIVET NYLON, 3.5	
*	4-942-204-01	PLATE, GROUND	

Ref.No.	Part No.	Description	Remark
*	4-953-350-01	PLATE, GROUND	
		< CAPACITOR >	
C1	1-162-280-31	CERAMIC 82PF 10% 50V (GX315/GX415)	
C2	1-162-215-31	CERAMIC 47PF 5% 50V (GX315/GX415)	
C4	1-162-282-31	CERAMIC 100PF 10% 50V (GX315/GX415)	
C5	1-161-379-00	CERAMIC 0.01uF 20% 25V (GX315/GX415)	
C6	1-161-379-00	CERAMIC 0.01uF 20% 25V (GX315/GX415)	
C7	1-161-379-00	CERAMIC 0.01uF 20% 25V (GX315/GX415)	
C8	1-124-910-11	ELECT 47uF 20% 50V (GX315/GX415)	
C9	1-161-379-00	CERAMIC 0.01uF 20% 25V (GX315/GX415)	
C10	1-161-379-00	CERAMIC 0.01uF 20% 25V (GX315/GX415)	
C11	1-124-907-11	ELECT 10uF 20% 50V (GX315/GX415)	
C12	1-161-379-00	CERAMIC 0.01uF 20% 25V	
C14	1-161-379-00	CERAMIC 0.01uF 20% 25V	
C15	1-124-925-11	ELECT 2.2uF 20% 100V (GX315/GX415)	
C16	1-161-379-00	CERAMIC 0.01uF 20% 25V (GX315/GX415)	
C17	1-162-291-31	CERAMIC 560PF 10% 50V (GX315/GX415)	
C19	1-124-907-11	ELECT 10uF 20% 50V (GX315/GX415)	
C20	1-162-288-31	CERAMIC 330PF 10% 50V (GX315/GX415)	
C21	1-162-209-31	CERAMIC 27PF 5% 50V (GX315/GX415)	
C301	1-124-907-11	ELECT 10uF 20% 50V	
C302	1-162-215-31	CERAMIC 47PF 5% 50V (EXCEPT G)	
C302	1-162-283-31	CERAMIC 120PF 10% 50V (G)	
C303	1-124-907-11	ELECT 10uF 20% 50V	
C351	1-124-907-11	ELECT 10uF 20% 50V	
C352	1-162-215-31	CERAMIC 47PF 5% 50V (EXCEPT G)	
C352	1-162-283-31	CERAMIC 120PF 10% 50V (G)	
C353	1-124-907-11	ELECT 10uF 20% 50V	
C401	1-162-282-31	CERAMIC 100PF 10% 50V (G)	

MAIN

Ref.No.	Part No.	Description	Remark
C402	1-126-962-11	ELECT 3.3uF	20% 50V
C403	1-162-282-31	CERAMIC 100PF	10% 50V (EXCEPT G)
C403	1-162-286-31	CERAMIC 220PF	10% 50V (G)
C404	1-162-282-31	CERAMIC 100PF	10% 50V
C405	1-104-792-51	ELECT 33uF	20% 16V
C406	1-130-480-00	MYLAR 0.0056uF	5% 50V
C407	1-130-473-00	MYLAR 0.0015uF	5% 50V
C408	1-126-962-11	ELECT 3.3uF	20% 50V
C420	1-164-159-11	CERAMIC 0.1uF	50V
C422	1-124-477-11	ELECT 47uF	20% 25V (GX315/GX415)
C423	1-124-477-11	ELECT 47uF	20% 25V (GX315/GX415)
C424	1-162-282-31	CERAMIC 100PF	10% 50V (G)
C425	1-162-282-31	CERAMIC 100PF	10% 50V (G)
C426	1-162-282-31	CERAMIC 100PF	10% 50V (G)
C427	1-162-282-31	CERAMIC 100PF	10% 50V (G)
C429	1-162-282-31	CERAMIC 100PF	10% 50V (G)
C430	1-162-294-31	CERAMIC 0.001uF	10% 50V
C431	1-137-364-11	FILM 0.001uF	5% 50V
C433	1-124-925-11	ELECT 2.2uF	20% 100V
C434	1-162-286-31	CERAMIC 220PF	10% 50V (G)
C435	1-162-282-31	CERAMIC 100PF	10% 50V (G)
C437	1-124-907-11	ELECT 10uF	20% 50V
C451	1-162-282-31	CERAMIC 100PF	10% 50V (G)
C452	1-126-962-11	ELECT 3.3uF	20% 50V
C453	1-162-282-31	CERAMIC 100PF	10% 50V (EXCEPT G)
C453	1-162-286-31	CERAMIC 220PF	10% 50V (G)
C454	1-162-282-31	CERAMIC 100PF	10% 50V
C455	1-104-792-51	ELECT 33uF	20% 16V
C456	1-130-480-00	MYLAR 0.0056uF	5% 50V
C457	1-130-473-00	MYLAR 0.0015uF	5% 50V
C458	1-126-962-11	ELECT 3.3uF	20% 50V
C474	1-162-282-31	CERAMIC 100PF	10% 50V (G)
C475	1-162-282-31	CERAMIC 100PF	10% 50V (G)
C476	1-162-282-31	CERAMIC 100PF	10% 50V (G)
C477	1-162-282-31	CERAMIC 100PF	10% 50V (G)
C479	1-162-282-31	CERAMIC 100PF	10% 50V (G)
C484	1-162-286-31	CERAMIC 220PF	10% 50V (G)
C485	1-162-282-31	CERAMIC 100PF	10% 50V (G)
C701	1-124-927-11	ELECT 4.7uF	20% 100V
C702	1-162-286-31	CERAMIC 220PF	10% 50V
C703	1-102-116-00	CERAMIC 680PF	10% 50V
C704	1-124-477-11	ELECT 47uF	20% 25V (GX315/GX415)

Ref.No.	Part No.	Description	Remark
C705	1-164-039-11	CERAMIC 3PF	0.25PF 50V
C706	1-102-989-00	CERAMIC 68PF	5% 500V
C707	1-102-989-00	CERAMIC 68PF	5% 500V
C708	1-124-120-11	ELECT 220uF	20% 25V
C709	1-124-477-11	ELECT 47uF	20% 25V
C710	1-164-159-11	CERAMIC 0.1uF	50V
C711	1-164-159-11	CERAMIC 0.1uF	50V
C712	1-136-161-00	FILM 0.047uF	5% 50V
C713	1-136-161-00	FILM 0.047uF	5% 50V
C715	1-164-096-11	CERAMIC 0.01uF	50V (G)
C716	1-164-096-11	CERAMIC 0.01uF	50V (G)
C717	1-164-096-11	CERAMIC 0.01uF	50V (G)
C718	1-164-096-11	CERAMIC 0.01uF	50V (G)
C719	1-164-096-11	CERAMIC 0.01uF	50V (G)
C720	1-164-096-11	CERAMIC 0.01uF	50V (G)
C721	1-161-494-00	CERAMIC 0.022uF	25V (G)
C726	1-162-215-31	CERAMIC 47PF	5% 50V (EXCEPT G)
C726	1-162-219-31	CERAMIC 68PF	5% 50V (G)
C727	1-124-911-11	ELECT 220uF	20% 50V (GX215)
C727	1-124-919-11	ELECT 220uF	20% 63V (GX315/GX415)
C749	1-124-911-11	ELECT 220uF	20% 50V (GX215)
C749	1-124-919-11	ELECT 220uF	20% 63V (GX315/GX415)
C751	1-124-927-11	ELECT 4.7uF	20% 100V
C752	1-162-286-31	CERAMIC 220PF	10% 50V
C753	1-102-116-00	CERAMIC 680PF	10% 50V
C754	1-124-477-11	ELECT 47uF	20% 25V (GX315/GX415)
C755	1-164-039-11	CERAMIC 3PF	0.25PF 50V
C756	1-102-989-00	CERAMIC 68PF	5% 500V
C757	1-102-989-00	CERAMIC 68PF	5% 500V
C758	1-124-120-11	ELECT 220uF	20% 25V
C759	1-124-477-11	ELECT 47uF	20% 25V
C760	1-164-159-11	CERAMIC 0.1uF	50V
C761	1-124-472-11	ELECT 470uF	20% 10V
C762	1-136-161-00	FILM 0.047uF	5% 50V
C763	1-136-161-00	FILM 0.047uF	5% 50V
C765	1-164-096-11	CERAMIC 0.01F	50V (G)
C766	1-164-096-11	CERAMIC 0.01uF	50V (G)
C767	1-164-096-11	CERAMIC 0.01uF	50V (G)
C768	1-164-096-11	CERAMIC 0.01uF	50V (G)

Ref.No.	Part No.	Description	Remark
C769	1-164-096-11	CERAMIC 0.01uF	50V (G)
C770	1-164-096-11	CERAMIC 0.01uF	50V (G)
C771	1-161-494-00	CERAMIC 0.022uF	25V (G)
C776	1-162-215-31	CERAMIC 47PF	5% 50V (EXCEPT G)
C776	1-162-219-31	CERAMIC 68PF	5% 50V (G)
C951	1-108-702-11	MYLAR 0.068uF	10% 100V
C952	1-108-702-11	MYLAR 0.068uF	10% 100V
C953	1-128-506-11	ELECT 6800uF	20% 50V (GX215)
C953	1-128-591-21	ELECT 6800uF	20% 56V (GX315/GX415)
C954	1-128-506-11	ELECT 6800uF	20% 50V (GX215)
C954	1-128-591-21	ELECT 6800uF	20% 56V (GX315/GX415)
C955	1-124-478-11	ELECT 100uF	20% 25V
C956	1-124-910-11	ELECT 47uF	20% 50V
C957	1-124-477-11	ELECT 47uF	20% 25V
C958	1-124-910-11	ELECT 47uF	20% 50V
C959	1-124-907-11	ELECT 10uF	20% 50V
C960	1-161-494-00	CERAMIC 0.022uF	25V
C961	1-161-494-00	CERAMIC 0.022uF	25V
C962	1-124-927-11	ELECT 4.7uF	20% 100V
C975	1-124-477-11	ELECT 47uF	20% 25V
C976	1-124-477-11	ELECT 47uF	20% 25V
C977	1-124-903-11	ELECT 1uF	20% 50V
C978	1-124-464-11	ELECT 0.22uF	20% 50V
C979	1-124-902-00	ELECT 0.47uF	20% 50V
C980	1-124-903-11	ELECT 1uF	20% 50V
C981	1-161-494-00	CERAMIC 0.022uF	25V
C982	1-161-494-00	CERAMIC 0.022uF	25V (GX315/GX415)
C983	1-161-494-00	CERAMIC 0.022uF	25V (GX315/GX415)
C984	1-124-557-11	ELECT 1000uF	20% 25V
< CONNECTOR >			
*CNJ102 1-568-845-11 SOCKET, CONNECTOR 31P			
CNJ701 1-573-095-11 SOCKET, CONNECTOR 15P			
*CNP113 1-750-384-11 CONNECTOR, BOARD TO BOARD 11P			
*CNP952 1-564-507-11 PLUG, CONNECTOR 4P (GX315/GX415)			
*CNP954 1-564-104-00 PIN, CONNECTOR (B3P-VH) 3P			
*CNP956 1-564-506-11 PLUG, CONNECTOR 3P			
< DIODE >			
D1	8-719-987-63	DIODE 1N4148M (GX315/GX415)	
D401	8-719-987-63	DIODE 1N4148M	

Ref.No.	Part No.	Description	Remark
D403	8-719-987-63	DIODE 1N4148M	
D701	8-719-933-41	DIODE HZS6C3L	
D702	8-719-987-63	DIODE 1N4148M	
D703	8-719-815-85	DIODE 1S1585	
D704	8-719-987-63	DIODE 1N4148M	
D705	8-719-987-63	DIODE 1N4148M	
D751	8-719-933-41	DIODE HZS6C3L	
D752	8-719-987-63	DIODE 1N4148M	
D753	8-719-815-85	DIODE 1S1585	
D951	8-719-312-09	DIODE RBA-402 (GX215)	
D951	8-719-302-38	DIODE RBV-602-01 (GX315/GX415)	
D952	8-719-010-78	DIODE UZ-13BSB	
D953	8-719-002-33	DIODE UZL-24L	
D954	8-719-987-63	DIODE 1N4148M	
D955	8-719-010-74	DIODE UZ-12BSB	
D956	8-719-010-29	DIODE UZ-4. 3BSB	
D962	8-719-010-47	DIODE UZ-6. 2BSC	
D963	8-719-933-41	DIODE HZS6C3L	
D964	8-719-985-53	DIODE HZS4ALL	
D965	8-719-987-63	DIODE 1N4148M	
D966	8-719-024-99	DIODE 11ES2-NTA2B (GX315/GX415)	
D967	8-719-024-99	DIODE 11ES2-NTA2B (GX315/GX415)	
D968	8-719-024-99	DIODE 11ES2-NTA2B (GX315/GX415)	
D969	8-719-024-99	DIODE 11ES2-NTA2B (GX315/GX415)	
D970	8-719-987-63	DIODE 1N4148M (GX315/GX415)	
D971	8-719-987-63	DIODE 1N4148M (GX315/GX415)	
D976	8-719-987-63	DIODE 1N4148M (GX215)	
D977	8-719-987-63	DIODE 1N4148M (GX215)	
< IC >			
IC1	8-759-169-99	IC SAA6579 (GX315/GX415)	
IC2	8-759-062-26	IC LC7073 (GX315/GX415)	
IC3	8-759-812-35	IC LA1235 (GX315/GX415)	
IC4	8-759-145-58	IC uPC4558C (GX315/GX415)	
IC306	8-759-634-50	IC M5218AL	
IC401	8-759-112-93	IC uPC4570HA-1	
IC402	8-759-805-14	IC LC7822	
< JACK >			
J401	1-580-825-11	JACK, PIN 6P (TAPE 2 IN, TAPE 2 REC OUT, TV/LD AUDIO IN)	
J402	1-573-028-21	JACK, PIN 4P (VIDEO AUDIO OUT, TAPE 1 /MD IN)	
J403	1-691-887-11	JACK, PIN 6P (TAPE 1/MD REC OUT, CD, PHONO)	

MAIN

Ref.No.	Part No.	Description	Remark
< COIL >			
L1	1-410-521-11	INDUCTOR 100uH (GX315/GX415)	
L701	1-420-872-00	COIL, AIR CORE	
L751	1-420-872-00	COIL, AIR CORE	
< TRANSISTOR >			
Q402	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q406	8-729-900-63	TRANSISTOR DTA124ES	
Q408	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q452	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q701	8-729-620-18	TRANSISTOR 2SA979-FG	
Q702	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
Q703	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q704	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q705	8-729-122-13	TRANSISTOR 2SA1221-K	
Q706	8-729-209-15	TRANSISTOR 2SD2012	
Q707	8-729-195-82	TRANSISTOR 2SC2958	
Q712	8-729-020-72	TRANSISTOR 2SD2438-OPY (GX215)	
Q712	8-729-020-29	TRANSISTOR 2SD2390-OPY (GX315/GX415)	
Q713	8-729-020-41	TRANSISTOR 2SB1587-OPY (GX215)	
Q713	8-729-020-25	TRANSISTOR 2SB1560-OPY (GX315/GX415)	
Q714	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
Q715	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q716	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q717	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q718	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q719	8-729-900-63	TRANSISTOR DTA124ES	
Q751	8-729-620-18	TRANSISTOR 2SA979-FG	
Q752	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
Q753	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q754	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q755	8-729-122-13	TRANSISTOR 2SA1221-K	
Q756	8-729-209-15	TRANSISTOR 2SD2012	
Q757	8-729-195-82	TRANSISTOR 2SC2958	
Q762	8-729-020-72	TRANSISTOR 2SD2438-OPY (GX215)	
Q762	8-729-020-29	TRANSISTOR 2SD2390-OPY (GX315/GX415)	
Q763	8-729-020-41	TRANSISTOR 2SB1587-OPY (GX215)	
Q763	8-729-020-25	TRANSISTOR 2SB1560-OPY (GX315/GX415)	
Q764	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
Q951	8-729-209-15	TRANSISTOR 2SD2012	
Q952	8-729-140-97	TRANSISTOR 2SB734-34 (GX215)	
Q952	8-729-018-59	TRANSISTOR 2SB1375-LC (GX315/GX415)	
Q953	8-729-180-92	TRANSISTOR 2SD809-K	
Q954	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q955	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q956	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q957	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q958	8-729-900-36	TRANSISTOR DTC124ES	

Ref.No.	Part No.	Description	Remark
Q959	8-729-904-39	TRANSISTOR DTC114TS	
Q960	8-729-119-78	TRANSISTOR 2SC2785-HFE (GX315/GX415)	
< RESISTOR >			
R1	1-247-807-31	CARBON 100 5% 1/4W (GX315/GX415)	
R2	1-249-411-11	CARBON 330 5% 1/4W (GX315/GX415)	
R3	1-249-405-11	CARBON 100 5% 1/4W (GX315/GX415)	
R5	1-249-421-11	CARBON 2.2K 5% 1/4W (GX315/GX415)	
R6	1-249-441-11	CARBON 100K 5% 1/4W (GX315/GX415)	
R7	1-249-441-11	CARBON 100K 5% 1/4W (GX315/GX415)	
R8	1-249-426-11	CARBON 5.6K 5% 1/4W (GX315/GX415)	
R10	1-247-862-11	CARBON 20K 5% 1/4W (GX315/GX415)	
R302	1-247-887-00	CARBON 220K 5% 1/4W	
R303	1-247-887-00	CARBON 220K 5% 1/4W	
R305	1-249-416-11	CARBON 820 5% 1/4W	
R352	1-247-887-00	CARBON 220K 5% 1/4W	
R353	1-247-887-00	CARBON 220K 5% 1/4W	
R355	1-249-416-11	CARBON 820 5% 1/4W	
R401	1-249-411-11	CARBON 330 5% 1/4W	
R402	1-249-417-11	CARBON 1K 5% 1/4W	
R403	1-249-417-11	CARBON 1K 5% 1/4W	
R404	1-249-425-11	CARBON 4.7K 5% 1/4W	
R405	1-249-417-11	CARBON 1K 5% 1/4W	
R407	1-249-425-11	CARBON 4.7K 5% 1/4W	
R413	1-249-437-11	CARBON 47K 5% 1/4W	
R414	1-247-897-11	CARBON 560K 5% 1/4W	
R415	1-249-416-11	CARBON 820 5% 1/4W	
R416	1-247-897-11	CARBON 560K 5% 1/4W	
R417	1-249-437-11	CARBON 47K 5% 1/4W	
R418	1-249-417-11	CARBON 1K 5% 1/4W	
R419	1-247-897-11	CARBON 560K 5% 1/4W	
R420	1-249-417-11	CARBON 1K 5% 1/4W (G)	
R421	1-249-408-11	CARBON 180 5% 1/4W	
R425	1-249-425-11	CARBON 4.7K 5% 1/4W	
R426	1-249-437-11	CARBON 47K 5% 1/4W	
R427	1-249-437-11	CARBON 47K 5% 1/4W	
R430	1-249-437-11	CARBON 47K 5% 1/4W	
R431	1-249-425-11	CARBON 4.7K 5% 1/4W	
R432	1-247-883-00	CARBON 150K 5% 1/4W	
R434	1-249-425-11	CARBON 4.7K 5% 1/4W	
R436	1-249-417-11	CARBON 1K 5% 1/4W	
R437	1-249-437-11	CARBON 47K 5% 1/4W	
R438	1-249-429-11	CARBON 10K 5% 1/4W	
R439	1-249-437-11	CARBON 47K 5% 1/4W	
R440	1-249-437-11	CARBON 47K 5% 1/4W	
R441	1-249-413-11	CARBON 470 5% 1/4W	
R444	1-249-437-11	CARBON 47K 5% 1/4W	
R451	1-249-411-11	CARBON 330 5% 1/4W	
R452	1-249-417-11	CARBON 1K 5% 1/4W	

Ref.No.	Part No.	Description	Remark				Ref.No.	Part No.	Description	Remark			
R453	1-249-417-11	CARBON	1K	5%	1/4W		R738	1-249-393-11	CARBON	10	5%	1/4W	
R454	1-249-425-11	CARBON	4.7K	5%	1/4W		R739	1-249-412-11	CARBON	390	5%	1/4W (GX215)	
R455	1-249-417-11	CARBON	1K	5%	1/4W		R739	1-249-442-11	CARBON	510	5%	1/4W (GX315/GX415)	
R457	1-249-425-11	CARBON	4.7K	5%	1/4W		R744	1-249-429-11	CARBON	10K	5%	1/4W	
R463	1-249-437-11	CARBON	47K	5%	1/4W		R745	1-249-399-11	CARBON	33	5%	1/4W	
R464	1-247-897-11	CARBON	560K	5%	1/4W		R746	1-249-393-11	CARBON	10	5%	1/4W (G)	
R465	1-249-416-11	CARBON	820	5%	1/4W		R747	1-249-393-11	CARBON	10	5%	1/4W (G)	
R466	1-247-897-11	CARBON	560K	5%	1/4W		R748	1-249-393-11	CARBON	10	5%	1/4W (G)	
R467	1-249-437-11	CARBON	47K	5%	1/4W		R749	1-249-399-11	CARBON	33	5%	1/4W	
R468	1-249-417-11	CARBON	1K	5%	1/4W		R751	1-249-417-11	CARBON	1K	5%	1/4W	
R469	1-247-897-11	CARBON	560K	5%	1/4W		R752	1-249-434-11	CARBON	27K	5%	1/4W	
R470	1-249-417-11	CARBON	1K	5%	1/4W (G)		R753	1-249-435-11	CARBON	33K	5%	1/4W	
R471	1-249-408-11	CARBON	180	5%	1/4W		R754	1-249-421-11	CARBON	2.2K	5%	1/4W	
R481	1-249-425-11	CARBON	4.7K	5%	1/4W		R755	1-249-426-11	CARBON	5.6K	5%	1/4W	
R486	1-249-417-11	CARBON	1K	5%	1/4W		R756	1-249-414-11	CARBON	560	5%	1/4W	
R499	1-247-807-31	CARBON	100	5%	1/4W (GX215)		R757	1-249-423-11	CARBON	3.3K	5%	1/4W	
R701	1-249-417-11	CARBON	1K	5%	1/4W		R758	1-249-411-11	CARBON	330	5%	1/4W	
R702	1-249-434-11	CARBON	27K	5%	1/4W		R759	1-249-409-11	CARBON	220	5%	1/4W	
R703	1-249-435-11	CARBON	33K	5%	1/4W		R760	1-249-409-11	CARBON	220	5%	1/4W	
R704	1-249-421-11	CARBON	2.2K	5%	1/4W		R761	1-249-409-11	CARBON	220	5%	1/4W (GX215)	
R705	1-249-426-11	CARBON	5.6K	5%	1/4W		R761	1-247-811-31	CARBON	150	5%	1/4W (GX315/GX415)	
R706	1-249-414-11	CARBON	560	5%	1/4W		R762	1-249-434-11	CARBON	27K	5%	1/4W (GX215)	
R707	1-249-423-11	CARBON	3.3K	5%	1/4W		R762	1-247-864-11	CARBON	24K	5%	1/4W (GX315/GX415)	
R708	1-249-411-11	CARBON	330	5%	1/4W		R763	1-249-397-11	CARBON	22	5%	1/4W	
R709	1-249-409-11	CARBON	220	5%	1/4W		R764	1-249-428-11	CARBON	8.2K	5%	1/4W	
R710	1-249-409-11	CARBON	220	5%	1/4W		R765	1-249-409-11	CARBON	220	5%	1/4W	
R711	1-249-409-11	CARBON	220	5%	1/4W (GX215)		R766	1-249-397-11	CARBON	22	5%	1/4W	
R711	1-247-811-31	CARBON	150	5%	1/4W (GX315/GX415)		R767	1-249-393-11	CARBON	10	5%	1/4W	
R712	1-249-434-11	CARBON	27K	5%	1/4W (GX215)		R768	1-249-393-11	CARBON	10	5%	1/4W	
R712	1-247-864-11	CARBON	24K	5%	1/4W (GX315/GX415)		R770	1-249-424-11	CARBON	3.9K	5%	1/4W	
R713	1-249-397-11	CARBON	22	5%	1/4W		△R776	1-208-602-11	WIREWOUND	0.22	10%	2W	F
R714	1-249-428-11	CARBON	8.2K	5%	1/4W		△R777	1-208-602-11	WIREWOUND	0.22	10%	2W	F
R715	1-249-409-11	CARBON	220	5%	1/4W		R778	1-249-425-11	CARBON	4.7K	5%	1/4W	
R716	1-249-397-11	CARBON	22	5%	1/4W		R779	1-249-431-11	CARBON	15K	5%	1/4W	
R717	1-249-393-11	CARBON	10	5%	1/4W		R781	1-249-433-11	CARBON	22K	5%	1/4W	
R718	1-249-393-11	CARBON	10	5%	1/4W		R785	1-249-397-11	CARBON	22	5%	1/4W	
R720	1-249-424-11	CARBON	3.9K	5%	1/4W		R786	1-249-397-11	CARBON	22	5%	1/4W	
△R726	1-208-602-11	WIREWOUND	0.22	10%	2W	F	R787	1-249-393-11	CARBON	10	5%	1/4W	
△R727	1-208-602-11	WIREWOUND	0.22	10%	2W	F	R788	1-249-393-11	CARBON	10	5%	1/4W	
R728	1-249-425-11	CARBON	4.7K	5%	1/4W		R790	1-249-429-11	CARBON	10K	5%	1/4W	
R729	1-249-431-11	CARBON	15K	5%	1/4W		R794	1-249-412-11	CARBON	390	5%	1/4W (GX215)	
R730	1-249-429-11	CARBON	10K	5%	1/4W		R794	1-249-442-11	CARBON	510	5%	1/4W (GX315/GX415)	
R731	1-249-434-11	CARBON	27K	5%	1/4W		R796	1-249-393-11	CARBON	10	5%	1/4W (G)	
R732	1-249-417-11	CARBON	1K	5%	1/4W		R797	1-249-393-11	CARBON	10	5%	1/4W (G)	
R733	1-249-435-11	CARBON	33K	5%	1/4W		R798	1-249-393-11	CARBON	10	5%	1/4W (G)	
R734	1-249-427-11	CARBON	6.8K	5%	1/4W		R799	1-249-412-11	CARBON	390	5%	1/4W (GX215)	
R735	1-249-397-11	CARBON	22	5%	1/4W								
R736	1-249-397-11	CARBON	22	5%	1/4W								
R737	1-249-393-11	CARBON	10	5%	1/4W								

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△ are critical for safety.
Replace only with part number
specified.

MAIN

POWER

Ref.No.	Part No.	Description	Remark
R799	1-249-442-11	CARBON	510 5% 1/4W (GX315/GX415)
R801	1-249-415-11	CARBON	680 5% 1/4W
R804	1-247-895-00	CARBON	470K 5% 1/4W
R851	1-249-415-11	CARBON	680 5% 1/4W
R854	1-247-895-00	CARBON	470K 5% 1/4W
△R950	1-215-908-00	METAL OXIDE	33 5% 3W F (GX215)
△R950	1-215-909-11	METAL OXIDE	47 5% 3W F (GX315/GX415)
△R951	1-215-908-00	METAL OXIDE	33 5% 3W F (GX215)
△R951	1-215-909-11	METAL OXIDE	47 5% 3W F (GX315/GX415)
R952	1-247-743-11	CARBON	220 5% 1/2W
R953	1-249-422-11	CARBON	2.7K 5% 1/4W
R954	1-249-423-11	CARBON	3.3K 5% 1/4W
△R955	1-215-908-00	METAL OXIDE	33 5% 3W F (GX215)
△R955	1-216-473-11	METAL OXIDE	56 5% 3W F (GX315/GX415)
R956	1-249-405-11	CARBON	100 5% 1/4W
R957	1-249-410-11	CARBON	270 5% 1/4W
R958	1-249-410-11	CARBON	270 5% 1/4W
R959	1-249-441-11	CARBON	100K 5% 1/4W
R960	1-249-429-11	CARBON	10K 5% 1/4W
R963	1-249-395-11	CARBON	15 5% 1/4W
R964	1-249-423-11	CARBON	3.3K 5% 1/4W
R965	1-249-437-11	CARBON	47K 5% 1/4W
R966	1-249-429-11	CARBON	10K 5% 1/4W
R967	1-249-429-11	CARBON	10K 5% 1/4W
R968	1-249-417-11	CARBON	1K 5% 1/4W
R969	1-249-429-11	CARBON	10K 5% 1/4W
R970	1-249-426-11	CARBON	5.6K 5% 1/4W
R971	1-249-417-11	CARBON	1K 5% 1/4W
R972	1-249-426-11	CARBON	5.6K 5% 1/4W
R973	1-247-830-11	CARBON	910 5% 1/4W (GX315/GX415)
R974	1-249-425-11	CARBON	4.7K 5% 1/4W (GX315/GX415)
R999	1-249-397-11	CARBON	22 5% 1/4W (GX315/GX415)
< VARIABLE RESISTOR >			
RV1	1-223-240-11	RES, ADJ, CARBON 22K	(GX315/GX415)
< RELAY >			
RY401	1-515-614-11	RELAY	
RY701	1-515-533-11	RELAY	
< TERMINAL >			
TM1	1-537-488-11	TERMINAL BOARD (ANTENNA)	
TM701	1-537-376-11	TERMINAL BOARD (SPEAKERS)	

Ref.No.	Part No.	Description	Remark
< ENCAPSULATED COMPONENT >			
TU1	1-239-865-11	ENCAPSULATED COMPONENT (AEP, UK)	
TU1	1-239-562-11	ENCAPSULATED COMPONENT (G)	
TU1	1-239-864-11	ENCAPSULATED COMPONENT (EE)	
< VIBRATOR >			
X1	1-579-900-21	VIBRATOR, CRYSTAL (GX315/GX415)	(4.332MHz)
X2	1-577-358-21	VIBRATOR, CERAMIC (GX315/GX415)	(4MHz)

*	1-647-638-11	POWER BOARD	*****
< CAPACITOR >			
△C901	1-161-744-51	CERAMIC 0.01uF	400V (GX315/GX415)
C902	1-161-741-00	CERAMIC 0.001uF	10% 400V (G)
C903	1-161-741-00	CERAMIC 0.001uF	10% 400V (G)
C911	1-164-159-11	CERAMIC 0.1uF	50V (GX315/GX415:G)
C912	1-164-159-11	CERAMIC 0.1uF	50V (GX315/GX415:G)
< CONNECTOR >			
△CNP901	1-564-321-00	PIN, CONNECTOR 2P	
△CNP902	1-580-230-11	PIN, CONNECTOR (PC BOARD) 3P	
△CNP903	1-580-230-11	PIN, CONNECTOR (PC BOARD) 3P	(GX315:AEP, G, EE/GX415)
*CNP951	1-564-507-11	PLUG, CONNECTOR 4P	(GX315/GX415)
< DIODE >			
D901	8-719-987-63	DIODE 1N4148M	(GX315/GX415)
< FUSE >			
△F902	1-532-285-00	FUSE T1.25AL/250V	(GX215)
△F902	1-532-259-00	FUSE T1.6AL/250V	(GX315/GX415)
△F903	1-532-259-00	FUSE T1.6AL/250V	(GX315/GX415)
< FUSE HOLDER >			
FH902	1-533-293-11	FUSE HOLDER	
FH903	1-533-293-11	FUSE HOLDER	(GX315/GX415)
FH952	1-533-293-11	FUSE HOLDER	
FH953	1-533-293-11	FUSE HOLDER	(GX315/GX415)
< RELAY >			
△RY901	1-515-720-11	RELAY	(GX315/GX415)

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POWER**STANDBY****SW (1)****SW (2)****SW (3)****STONE****TRANSFORMER**

Ref.No.	Part No.	Description	Remark
		< TRANSFORMER >	
△T902	1-450-358-11	TRANSFORMER, POWER (GX315/GX415)	

*	1-654-001-11	STANDBY BOARD (GX315/GX415)	

		< CONNECTOR >	
*CNP107	1-565-295-11	PLUG, CONNECTOR 4P (GX315/GX415)	
		< SWITCH >	
S137	1-554-303-21	SWITCH, TACTILE (GX315/GX415) (POWER)	

*	1-647-633-11	SW (1) BOARD	

		< CONNECTOR >	
CNP701	1-573-109-11	PIN, CONNECTOR 15P	

*	1-647-634-11	SW (2) BOARD	

*	1-647-635-11	SW (3) BOARD	

		< CONNECTOR >	
CNP702	1-691-173-11	CONNECTOR (BOARD TO BOARD) 3P	
		< SWITCH >	
S701	1-571-485-11	SWITCH, PUSH (2 KEY) (SPEAKERS A/B)	

*	1-647-632-11	STONE BOARD	

		< CAPACITOR >	
C501	1-130-489-00	MYLAR	0.033uF 5% 50V
C502	1-124-250-00	ELECT	0.15uF 20% 50V
C503	1-130-481-00	MYLAR	0.0068uF 5% 50V
C504	1-137-441-11	FILM	0.027uF 5% 50V
C551	1-130-489-00	MYLAR	0.033uF 5% 50V

Ref.No.	Part No.	Description	Remark
C552	1-124-250-00	ELECT	0.15uF 20% 50V
C553	1-130-481-00	MYLAR	0.0068uF 5% 50V
C554	1-137-441-11	FILM	0.027uF 5% 50V
		< CONNECTOR >	
*CNP109	1-566-968-11	HOUSING, CONNECTOR(PC BOARD)6P	
		< RESISTOR >	
R501	1-249-429-11	CARBON	10K 5% 1/4W
R502	1-249-422-11	CARBON	2.7K 5% 1/4W
R507	1-249-415-11	CARBON	680 5% 1/4W
R508	1-247-903-00	CARBON	1M 5% 1/4W
R509	1-247-903-00	CARBON	1M 5% 1/4W
R510	1-247-903-00	CARBON	1M 5% 1/4W
R551	1-249-429-11	CARBON	10K 5% 1/4W
R552	1-249-422-11	CARBON	2.7K 5% 1/4W
R557	1-249-415-11	CARBON	680 5% 1/4W
R558	1-247-903-00	CARBON	1M 5% 1/4W
R559	1-247-903-00	CARBON	1M 5% 1/4W
R560	1-247-903-00	CARBON	1M 5% 1/4W
		< VARIABLE RESISTOR >	
RV401	1-223-362-11	RES, VAR, CARBON 100K/100K (BASS)	
RV402	1-223-363-11	RES, VAR, CARBON 125K/125K (TREBLE)	
RV403	1-238-965-21	RES, VAR, CARBON 100K/100K (BALANCE)	

*	1-647-631-11	TRANSFORMER BOARD	

		< CONNECTOR >	
*CNP955	1-564-243-11	PIN, CONNECTOR 6P	
		< CAPACITOR >	
C921	1-164-159-11	CERAMIC	0.1uF 50V (G)
C922	1-164-159-11	CERAMIC	0.1uF 50V (G)
		< TRANSFORMER >	
△T901	1-426-733-11	TRANSFORMER, POWER (GX215)	
△T901	1-426-734-11	TRANSFORMER, POWER (GX315:AEP,G,EE)	
△T901	1-426-735-11	TRANSFORMER, POWER (GX415)	
△T901	1-426-986-11	TRANSFORMER, POWER (GX315:UK)	

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VOL

Ref.No.	Part No.	Description	Remark
*	A-4369-558-A	VOL BOARD, COMPLETE (GX215)	
*	A-4369-228-A	VOL BOARD, COMPLETE (GX315)	
*	A-4369-562-A	VOL BOARD, COMPLETE (GX415)	

< CAPACITOR >			
C436	1-137-371-11	FILM 0.015uF	5% 50V
C438	1-124-927-11	ELECT 4.7uF	20% 100V (GX315/GX415)
C439	1-124-927-11	ELECT 4.7uF	20% 100V (GX315/GX415)
C486	1-137-371-11	FILM 0.015uF	5% 50V
C505	1-162-206-31	CERAMIC 20PF	5% 50V
C506	1-124-925-11	ELECT 2.2uF	20% 100V
C507	1-162-196-31	CERAMIC 5.6PF	10% 50V
C508	1-126-962-11	ELECT 3.3uF	20% 50V
C511	1-124-464-11	ELECT 0.22uF	20% 50V
C513	1-126-962-11	ELECT 3.3uF	20% 50V
C516	1-124-477-11	ELECT 47uF	20% 25V
C517	1-124-477-11	ELECT 47uF	20% 25V
C555	1-162-206-31	CERAMIC 20PF	5% 50V
C556	1-124-925-11	ELECT 2.2uF	20% 100V
C557	1-162-196-31	CERAMIC 5.6PF	10% 50V
C558	1-126-962-11	ELECT 3.3uF	20% 50V
C563	1-126-962-11	ELECT 3.3uF	20% 50V
< CONNECTOR >			
*CNP103	1-750-383-11	CONNECTOR, BOARD TO BOARD 11P	
*CNP401	1-566-971-11	PIN, CONNECTOR (PC BOARD) 6P	
*CNP402	1-566-972-11	PIN, CONNECTOR (PC BOARD) 7P	
< DIODE >			
D404	8-719-987-63	DIODE 1N4148M	
< IC >			
IC403	8-759-112-93	IC uPC4570HA-1	
< TRANSISTOR >			
Q404	8-729-202-67	TRANSISTOR 2SK246-GR3	
Q454	8-729-202-67	TRANSISTOR 2SK246-GR3	
< RESISTOR >			
R445	1-247-858-11	CARBON 13K	5% 1/4W
R495	1-247-858-11	CARBON 13K	5% 1/4W
R503	1-249-441-11	CARBON 100K	5% 1/4W
R504	1-249-432-11	CARBON 18K	5% 1/4W
R505	1-249-438-11	CARBON 56K	5% 1/4W
R506	1-249-441-11	CARBON 100K	5% 1/4W

Ref.No.	Part No.	Description	Remark
R511	1-249-441-11	CARBON 100K	5% 1/4W
R513	1-247-903-00	CARBON 1M	5% 1/4W
R514	1-247-807-31	CARBON 100	5% 1/4W
R515	1-247-807-31	CARBON 100	5% 1/4W
R553	1-249-441-11	CARBON 100K	5% 1/4W
R554	1-249-432-11	CARBON 18K	5% 1/4W
R555	1-249-438-11	CARBON 56K	5% 1/4W
R556	1-249-441-11	CARBON 100K	5% 1/4W
< VARIABLE RESISTOR >			
RV701	1-241-852-11	RES, VAR, CARBON 100K/100K (GX215)	(VOLUME)
RV701	1-223-714-11	RES, VAR, CARBON 100K/100K (GX315/GX415)	(VOLUME)

MISCELLANEOUS			

8	1-696-456-11	WIRE (FLAT TYPE) (31 CORE)	
△CNJ901	1-696-570-21	CORD, POWER (UK)	
△CNJ901	1-575-651-11	CORD, POWER (EXCEPT UK)	
△CNJ902	1-526-794-11	OUTLET, AC (GX315:AEP,G,EE/GX415)	

ACCESSORIES & PACKING MATERIALS			

1-467-639-11	REMOTE COMMANDER (RM-U141)	(GX315/GX415)	
1-501-374-11	ANTENNA, LOOP		
1-501-594-11	ANTENNA (FM)	(GX215/GX315:AEP,UK,EE/GX415:AEP)	
3-758-301-11	MANUAL, INSTRUCTION (ENGLISH,FRENCH,GERMAN,DUTCH)	(AEP,UK)	
3-758-301-41	MANUAL, INSTRUCTION (SPANISH,SWEDISH,DANISH,FINNISH)	(AEP)	
3-758-301-51	MANUAL, INSTRUCTION (GERMAN)	(G)	
3-758-301-61	MANUAL, INSTRUCTION (ENGLISH,PORTUGUESE)	(EE)	
*	4-952-676-01	CUSHION	
*	4-967-035-01	INDIVIDUAL CARTON (GX215)	
*	4-967-037-01	INDIVIDUAL CARTON (GX315)	
*	4-967-039-01	INDIVIDUAL CARTON (GX415)	
	2-181-754-01	LID, BATTERY (for RM-U141)	

HARDWARE LIST			

#1	7-682-548-04	SCREW +BVTT 3X8	(S)
#2	7-682-548-09	SCREW +BVTT 3X8	(S)
#3	7-682-547-09	SCREW +BVTT 3X6	(S)

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<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
#4	7-682-560-04	SCREW +BVTT 4X6 (S)	
#5	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
#6	7-685-647-79	SCREW +BVTP 3X10 TYPE2 IT-3	
#7	7-621-849-00	SCREW, TAPPING	

STR-GX215/GX315/GX415